

DISSERTATION

Yomayra Puentes-Rivera

**WHISPERS OF MEMORY, MURMURS OF HISTORY
ACOUSTIC MONU-MEMORIALS IN PUBLIC SPACES**

Exploratory research of strategies used to create acoustic experiences of
commemoration, remembrance, mourning and memory

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Abstract

This research seeks to make an exploratory study of the strategies used by the creators of monuments, memorials, and commemorative places located in the public spaces that use sound as one of the primary raw material in their design. The term *acoustic monu-memorials* was coined in this research to encircle these structures and places. In order to achieve the goal of this research, it was necessary to compile a number of samples, primarily after the digital recording era of captured sound around 1971 to the present. The compilation was relevant because such a compendium was not found in the literature, and to the author's knowledge, a comprehensive investigation of the strategies used in planning acoustic *monu-memorials* in the urban spaces does not exist.

The method used to create such compendium was to send a question to people with different background identities, such as visual and sound artists, musicians, art curators, and heritage scholars among others. This question produced a selection of 51 examples of acoustic monu-memorials located in public spaces. Subsequently, the examples were classified into four major categories according to their form and nature. Additionally, two examples from the main categories were chosen as case studies: The *Sinti and Roma Memorial* in Berlin, Germany and the *Niche* monument in Cali, Colombia. These study cases were presented, described, and analysed in detail as they represent the type of what could be defined as an acoustic *monu-memorial* in general.

Lynch's (1960) five elements that help individuals build the image of the city were transferred and used as a tool to help to build this image into acoustic terms. A thorough analysis of the acquired data yielded found the strategies used by the designers to shape, modify, transform, and structure public space. These strategies are entitled *Sound Spaces*. Moreover, a list entitled *Urban Acoustic Commemoration Code* was compiled. This list of suggestions addresses urban planners, architects, artists, designers, and general public interested in the aspects involved when creating acoustic commemoration phenomena in public spaces.

KEY WORDS: collective listening, auditory awareness, recall, sound art, intangible acoustic heritage, tribute, recollection, monument, memory, remembrance.

To B & R
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Introduction

“Sound imposes a narrative on you...
and it’s always someone else’s narrative.”

(Prochnik 13)

The present work was written in the acoustic environment of a library in which the beautiful wooden floor amplified the sound of each step given by its users interrupting concentration on many occasions.

Unless you are an acoustic engineer, an architect, a landscaper or an urban sound planner, the general public has normally little influence on the design and planning of the acoustic environment in our spaces and cities. These professionals categorize, deal and transform the acoustic character of our cities and its acoustic perception, usually with a focus on the role of disturbing noises and the strategies to reduce it.

Urban acoustic environments are full of desirable and undesirable sounds. Our cities have sounds that we consider annoying and unbearable like ambulance sirens or car alarms, but we tolerate them as they are necessary. On the other hand, other sounds in public spaces are considered more desirable, such as the sound produced by water when falling into a fountain. Those sounds are part of a wide range of intentional or unintentional sounds. Within the category of intentional sounds in public spaces there are sounds that seek to commemorate, pay homage, or generate memory.

These topics are of great interest to artists. I have produced throughout my work ephemeral sound installations. One of my objectives was to awake recollections through audio and secondly that the audio creates a dialogue with passers-by in public urban spaces; spaces of which I am also a pedestrian who experiences the city. Through these site-specific installations I was aware on how audio creates space, a surrounded sphere that wrap the attention of the public and where the work requires at least a bit of time from the viewer; a viewer that ultimately can also become a performer.

What are the strategies used to commemorate and/or generate memory through the hands of artists, musicians, designers and media communicators? *Whispers of Memory, Murmurs of History. Acoustic Monu-Memorials in Public Spaces* is a phenomenological qualitative research that seeks to understand and interpret the role of sound in monuments, memorials and commemorative places located in public spaces.

Acoustic monu-memorials is the coined term that will be used for this research to encompasses the entire range of monuments, memorials, commemoratives places, warning monuments, counter-monuments, accidental monuments, tombs, memorial stones and all of the possible derivatives of these forms in the construction of commemoration and remembrance, that capture the relation between sound and memory in public spaces. Do sounds of monu-memorials modify, transform and structure urban space and, if so, how? This study aims to approach sound studies, memory, and public space in an interdisciplinary way.

The hypothesis is: that the more the possibilities to reproduce audio in public places technically improve —with smaller portable devices that intervene, create and modify entire soundscapes, shaping our perception of reality, emphasizing the immersion of the visitors, and creating memory through aural devices— the more the concept of monument transforms into memorial, and the future of collective *Urban Memory* will tilt from visual to acoustic.

According to R. MURRAY SCHAFER “the term *soundmark* is derived from landmark and refers to a community sound which is unique or possesses qualities which make it specially regarded or noticed by the people in that community (*The Soundscape* 10)” ... “such famous church or clock bells, horn or whistles. What would ... be London without Big Ben? (*The Soundscape* 239)”.

A specific question that arises is whether the sound produced by temporary and permanent acoustic monuments and memorials makes them stand out from their surroundings? Or could their sounds be considered as urban *soundmarks*?

Using interviews, detailed descriptions of acoustic monuments, memorials and personal observations; the present research wants to respond to the previous questions and to propose a classification based on the different strategies that monuments use to invoke public reflections, commemoration and memory.

Research objectives

The principal aim of this research is to suggest effective tools in the future design of our urban acoustic environments of memory and commemoration through the description of the different strategies used by acoustic monu-memorials.

The secondary aim is that the observations, product of this research, can help urban planners, architects, artists, designers and general public delve into the aspects involved in the acoustic commemoration phenomena in public spaces.

Research methodology

Citizens are exposed every day to environments full of sounds. The interpretation of places where audios are intentionally reproduced to activate memory requires first of all the identification and definition of some key concepts, namely: *Soundmarks*, acoustic monu-memorials and urban identity.

Once the concepts were identified and defined, the next step was to send a question to people with different backgrounds like: heritage scholars, art curators, visual and sound artists, musicians among others.

These questions produced a list of 51 examples of acoustic monu-memorials located in public spaces that use sound as the main source. Then, the examples were classified in four major categories according by their form and nature. These are: Acoustic Direct Monu-memorials – Passive approach, acoustic Direct Monu-memorials – Active approach, acoustic Indirect Monu-memorials and acoustic Indirect Monu-memorials – Active approach.

The key concepts were brought into context with two specific case studies: The *Sinti and Roma Memorial* in Berlin, Germany and the *Niche* monument located in Cali, Colombia. These cases from the two main categories were presented, described and analysed in detail as they represent the type of what could be defined in general as an acoustic *monu-memorial*. In the finding section the strategies —entitled as *sound spaces*— used by monu-memorials to shape, modify, transform, and structure public space beyond the visual components were described and analysed.

The samples yielded results and conclusions about the use and meaning of sound in monuments, memorials and commemoratives places located in public spaces. The final section of this research entitled *Urban Acoustic Commemoration Code* is dedicated to present a list of suggestions for future creators of acoustic *monu-memorials*. A section where I linked my personal experience and direct and indirect observations with the interpretation of the findings.

1

"Memory is like the most stupid dog,
you throw it a stick and it brings you any old thing."
(Loriga 50)

1 Materializing Memory

... listening is more than listening even more than a multi-sensorial experience as it is also affected by (and, in turn, affects) memories, feelings, knowledge, and also spaces and devices, as well as perhaps endless array of specific situations in which the listening takes place. (Cobussen et al. 6–7).

Monuments, memorials and commemorative places are the usual words used to name the material manifestation of commemoration, remembrance and memory located in public spaces.

There are however other words that describe in a more precise way their purpose. Those words exist for example in German language. Compound words like: Denkmal, Ehrenmal, Mahnmal and Gedenkstätte/Gedenkorte.

Denkmal: *Denk* comes from the verb *denken* –to think, and the noun *Mal* –mark or something related to time. An approximate translation would be a ‘mark to think or time to think’, resulting in a word to describe a memorial, to bring to mind something or someone, to remember, to commemorate a person or an event. “Martin Luther invented it for his Old Testament of 1523 (qtd Nelson and Olin 4)”.

Denkzeichen: *Denk* comes from the verb *denken* –to think, and the noun *Zeichen* –sign. An approximate translation would be a ‘sign to think’, resulting in a word to describe a memorial, to point out something or someone, to remember.

Ehrenmal: comes from the verb *ehren* –to honor, and again the noun *Mal* –mark or something relative to time. Translates as a ‘sign to honor or time to honor’, a word to describe a monument, which exalts or honors someone or something like a special event in the past.

Mahnmal: comes from the verb *mahnen* –to warn, to admonish, a warning memorial dedicated to future generations that reminds them not to repeat a negative event that already happened in the past. “... a critical statement about the past (Neumann 10).”

Gedenkstätte/Gedenkorte: comes from the verb *gedenken* –to remember, to recall, and the nouns *Stätte* –sites and *Orte* –places. The words mean

commemorative places. “The term could refer to a larger landscaped complex with several different monuments. In most cases, a *Gedenkstätte* includes the display of information administering a memorial complex (Neumann 11).”

Vergangenheitsbewältigung: comes from the noun *Vergangenheit* –past, and the noun *Bewältigung* –an effort to deal with a difficult situation. The term means to come into terms with the past.

Vergangenheit aufarbeiten: comes from the verb *arbeiten* –to work, and the prefix *auf* –to open or to go upwards. Which gives the verb the nuance of accounting for the past.

The use of compound words in German language amplifies the number of terms related to memory. For example: Denkmallandschaft (memorial landscape), Kulturdenkmal (Cultural heritage site), Naturdenkmal (Natural monument), Baudenkmal (architectural or historical monument), Kunstdenkmal (artistic historical monument), Kriegerdenkmal or Gefallenendenkmal (war memorial), Bodendenkmal (archaeological site), Literaturdenkmal (literary monument), among others.

The previous list shows a broad spectrum of words that can be used to name objects, structures or spaces related to memory. The fact that these words exist gives an account of the weight that is given to memory in different places. Due to historic circumstances certain groups of people feel that they have to deal deeper with their pasts and probably therefore their language has had the time to develop these specific words

more than in other groups. *Mahnmal* as a term does not exist in the Spanish language for example and you would need to describe it.

Public memorialization of a single person, several people or a specific event is presented usually in the form of statues, sculptures, obelisks, art objects, fountains, buildings or different types of structures. There can also be gravestones, shrines, tombs, memorial stones, plaques. Sometimes these are counter-monuments or accidental monuments. Whatever the case the most two common words used to name an object related to memory are: monuments and memorials.

As an exercise, and to know what the definition of these words for the general public is —the one that deals with monuments and memorials in public spaces almost every day— it is possible to surf on the Internet and read on informal webpages some of the perceptions of what these words mean. For example, a Texan and former architect living in New York posted in his blog:

The way I always learned it, a monument is an architectural element and a memorial is a memory signifier. So while they may be the same actual object, whether you call that object a monument or memorial depends on what function of that object you're describing or which takes precedence – the presence of form and physical architecture or the presence of history and transcendent memory ... (Miesby).

A graduate in Language Studies with a master's degree in Linguistics wrote about the definitions of monument and memorial as follows:

- Monument is a structure, statue, or a building that is built to honour someone notable or a special event.

- Memorial is a structure or a statue that is built to remember a dead person or a group of people who died in an important past event.

Objective/Purpose:

- Paying tribute or honouring a person for his deeds or to mark an impression about an important event is the objective of a monument.

- Continuing to remember someone even after death is the objective of a memorial.

Architectural Importance:

- Monuments carry a lot of architectural values as they come in the form of buildings too.

- Memorials, on the other hand, do not carry so much of an architectural value like a monument.

Monument is said to have a broader concept than a memorial ... A memorial and a monument, both may have been built in memoriam of individuals. While a monument may be built in memory of a single individual, a memorial can be built in memory of several individuals (Koshal).

The proposed definitions agree on the architectural relevance of the monuments and the role of memory in the memorials. Brandon Tran added in Koshal's entry: "Another site said a Monument is a figure, while a Memorial is still a way to honour someone just without a 'figure'". Each commentary and each input broaden and makes it difficult at the same time to define the meaning of these two words accurately.

The architect Beltrán García in his text *Moyocoyani el Diseño de la Memoria construida a Inicios del Siglo XXI* underlines the two methods of remembering the past: memory and history. In his study he proposes a differentiation between monuments and

memorials: monuments as the product of history and memorials as the creation of memory.

He exposes that monuments are passively accepted made to be contemplated and observed, built on a huge scale and permanent duration of life. Monuments are occupiers of space.

By contrast memorials are experienced actively in society; open to interpretation, made in human scale, with limited life. Memorials are creators of space.

He insists that memorials and monuments are almost opposite in the construction of memory with antagonistic uses. (Figure 1-1 to consult his complete table)

The case study used for Beltrán to expose his differentiation was *El Zócalo*, the popular name given to the main square in Central Mexico City. He analysed this space from the 14th to the 21st century: a place that has witnessed the installation and removal on numerous occasions of monuments, fountains, gardens, markets, among other constructions, objects and ornaments, a place where history and memory coexist.

Miesby, Koshal, Brandon Tran and Beltrán definition aspects are extremely useful as an attempt to define the main differences between monuments and memorials, and as well to understand how they complement each other.

Nevertheless, all these characteristics are applicable in a general way but once a 'case' is observed in detail, these artificial borders begin to be problematic and turn blur. This

dichotomy turns even more challenging when monuments and memorials are analysed under sound terms.

In monuments and memorials that use audio in their design, sound is per se occupier and creator of space. Few and multiple voices can be heard, the life span of sound can last a life time or be in constant transformation. Monuments and memorials can be focused in events and time as well as in places and content, they can be passively accepted or exercised actively by a society, heard or active listened, reach broad or focal distances, be addressed to honour, to pay homage, to commemorate, to remember a single person or several individuals, its source can be revealed, even displayed in an imposing way or included within an architectural form or also hidden. Finally, audio in monuments and memorials can be presented in a figurative or an abstract form. Therefore, for the purpose of this research, sound will form space instead of occupying or creating it.

The main reason why sound can oscillate so easily between these limits is that sound is more malleable than visual forms. Therefore, a differentiation between a sound monument and a sound memorial cannot be done. Instead of dividing into two different categories: monuments and memorials, the term acoustic monu-memorials is coined for this research.

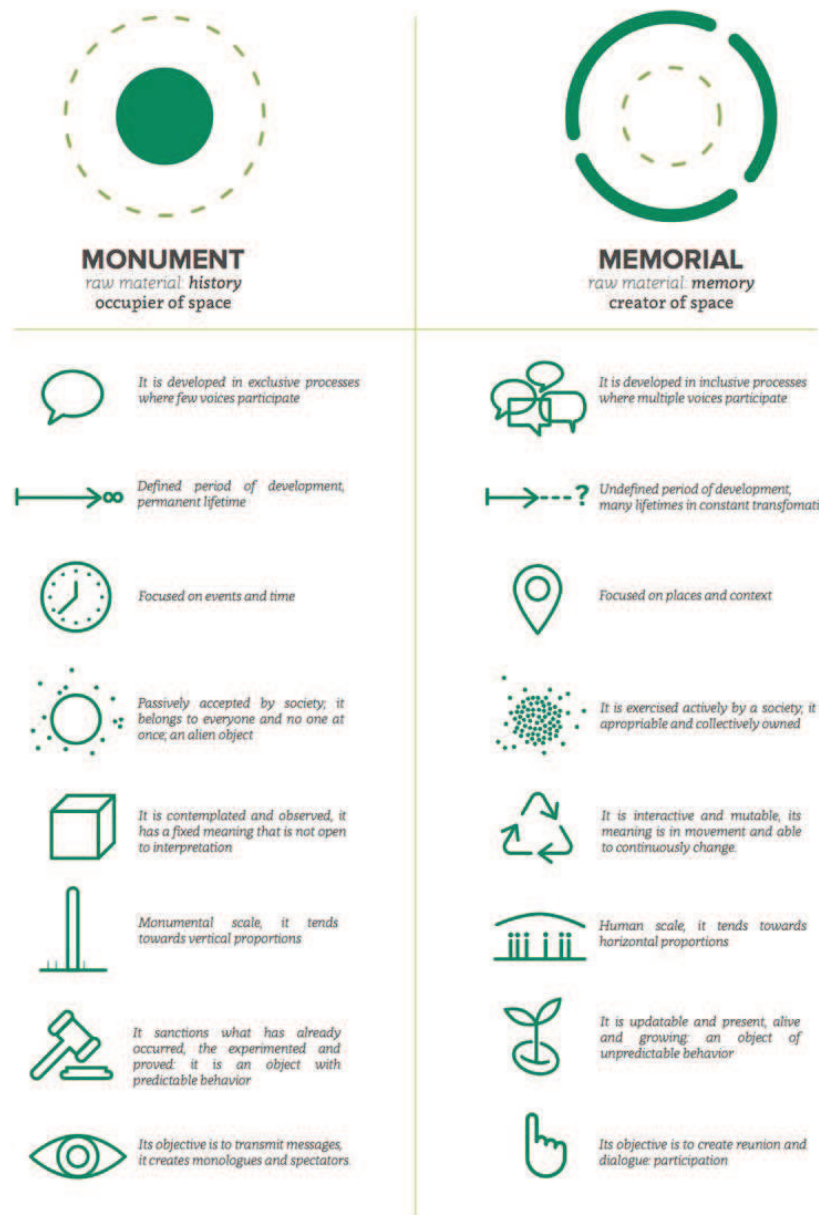


Figure 1-1 Monument and Memorial

Here in English from (S. Beltrán García)'Irrestorable'. 2015. MVT journal. Originally in Spanish in (S. S. Beltrán García 104)

1.1 First monu-memorials that produced sound

In nature are scenarios such as mountain valleys, canyon walls, caves, rock cliffs facing water, among others to hear echoes. Our ancestors could experience them producing very short sounds, waiting until the produced sounds or voices were reflected in the surrounding walls and then some seconds later, they could hear the sounds again in a weaker version and as a separate sound source. Even today this phenomenon astonishes us, so it is not surprising that our ancestors wanted to repeat the conditions to reproduce the experience.

The Prehistoric site *Easter Aquorthies* (built ca. 3000 BCE in northeast Scotland) could be one candidate for the first acoustic commemorative place or audio monu-memorial. Studied in 1998 by Watson and Keating, this open stone circle emits a constant echo where (the study suggest) listeners outside the monument remain unaware of the sound inside.

Letting aside for a moment the debate whether the acoustic phenomenon inside of the stones was intentional or not, the experience arises the question if the authors of this intentional echo wanted something to be remembered? If so, what was that something, knowledge, a performance, an event, a spiritual experience?

Probably we will never know it with certainty, nor will we ever know its original name — if it ever had one. What we do know is that ancient societies based their lives in the regular and cyclic periods of time, sunrise and sunset, summer and winter, full moon and new moon; as everything repeated periodically, the echo could be the perfect tool to recreate this cyclic experience on earth.

Representations of superior beings in different cultures have been both visual and sonorous. The constant echo emitted by the stones could be the strategy to experience the endless cyclic universe on earth and represent periodically its presence in the shape of acoustic gods.

Now we know that when we see the sky, we see the past, if we take the sunlight, for example, when we see its light, we see it as it was eight minutes and twenty seconds ago, but for the authors of the monument and its spectators, the sky was an endless return. Life was a present continuous tense, where probably the creation of these artificial scenarios —or *acoustic monu-memorials*— commemorated the encapsulated time.

Another example is the pyramid of Kukulcán (built in 12th CE) at Chichén Itzá in Mexico, located in an open field and studied extensively by (Lubman) (between 1998 and 2015). The pyramid responds acoustically to the sound of people clapping while standing near the base of one of the four staircases —the north-northeast. As a result of this action, the sound that can be heard is a chirp echo. His studies suggest that the echo is intentional and not just a design flaw, and although the sonograms of the echo produced in response to the applause and the singing of the male Quetzal —a local bird venerated by Mayas (the ones who built the pyramid)— are not identical, the similitudes are

striking and suggest that the active participation of the visitors reanimate the spirit voice of the Quetzal.

In both examples the performance of the visitor is required, the action to produce a direct sound and the reflection that arrives after with delay, can be considered as the resulting acoustic twin. It resembles the parallel strategy to follow after the repetition required in storytelling, in oral tradition.

It is possible for us to imagine these two examples as part of Ithuriel's collections, the narrator's uncle in *The Canvasser's tale* a story published in 1876, written by (Twain) that describes a man that spent his entire fortune collecting echoes around the world.

1.2 'Legible representations of aural experience'

Before the invention of sound machines, the inscription of sound took place through what Lisa Gitelman has called "legible representations of aural experience" (1999, 15). This involved not only musical notation but also words about sound and aural perception, and recognizing the different historical ways in which technologies of the legible made and still make sound circulation possible (Gautier 7).

As recorded sound is a relatively new technology (ca. 1857), we do not have direct access to the sounds of the past. Historical texts are 'a legible representation of aural experience' which are really helpful to find these earliest sound 'recordings'. "Historical text as in which people described what they heard and what these sounds meant to them" (Bijsterveld et al. 14).

In the same line, Bruce R. Smith extrapolates sounds also from maps, plays, ballads from oral tradition and also architectural remains in order to find what “he calls the ‘syntax’ for making sense of the sounds” (33).

Another ‘legible representations of aural experience’ are: travel writings, novels, poems, literary histories, songbooks, grammars, ethnographies, political writings on language, orthographies and practices of music notation; All of these ‘legibles’ were used by Ana María Ochoa Gautier in her interpretation of the sonorous; in relation between the colonial and the modern in her book *Aurality Listening & Knowledge in Nineteenth-Century Colombia*.

A project called *The World Soundscape Project Sound References in Literature*, an initiative that wants to reconstruct the sound of the past, is an online database that grows every day, and until now has about 1084 literature descriptions —classified by author, geographical region and time period—. This database has been developed under the head of Barry Truax. The entry number 529¹ is a reference to the Epic of Gilgamesh:

...In those days the world teemed, the people multiplied, the world bellowed like a wild bull, and the great god was aroused by the clamour and he said to the gods in council, "The uproar of mankind is intolerable, and sleep is no longer possible by reason of the babel." So, the gods in their hearts were moved to let loose the deluge; ...

¹) ('World Soundscape Project Sound References in Literature.') The database indicate that the quote was taken from: *The Epic of Gilgamesh*, trans, by N. K. Sandars, Penguin Classics, London, 1971 (1964), p. 105)

This Sumerian epic poem, written in clay tablets (c. 2100 BCE) took place in Uruk, city of Mesopotamia, valley of Euphrates, a place considered for many experts in the field as the first urban settlement in history (c. 4500 BCE) —due to its physical evidence and written documentation—.

From this epic poem, written on cuneiform system one can deduce that the gods are incapable of blocking certain sounds or that they have not developed the power to deal with this unknown urban phenomenon. It is particularly interesting that the oldest record in literature had a reference of noise annoyance, and the reference is about an urban acoustic experience. This story can give us clues about the character of Ur, Uruk and Sumer, loud cities full of life, of merchants offering their products, musicians, even the circulation of animal traffic. The poem shows us a negative perception of noise since the beginning of urban settlements and reveals how texts can help us to reconstruct sound. Media has showed us re-creational examples of ancient cities. Entertainment films, despite of their inaccuracy, lack of historical basis, or stereotypes help us to build an image that in some aspects resemble our contemporary cities; maybe because these imaginaries are filtered through the looking glass of our present. With this in mind it is possible for us to imagine how these cities would have sound.

“Noise has a variety of meanings ... the most important are...1. *Unwanted sounds*... 2. *Unmusical sounds* ...sound composed of non-periodic vibrations... 3. *Any loud sound* [and] 4. *Disturbance in any signalling system*” (Schafer, *The Soundscape* 182). Despite of some of the sounds produced by acoustic memorials can be perceived for some citizens as *noise*, this research concentrates in all kinds of sounds produced by acoustic monumemorials in public spaces.

In 1960 a group of researchers and composers in Canada started to notice that some sounds in the spaces were changing dramatically and/or rapidly disappearing. Trying to get attention on this issue they started to register sound in different spaces. They began to record *soundscapes*, term coined by the head of the group, the Canadian composer Murray Schafer who described the term as “the sonic environment [in its totality]. Technically, any portion of the sonic environments regarded as a field for study” (*The Soundscape* 274–75).

The *World Soundscape Project* (WSP) was born by analysing the negative transformation of Vancouver’s acoustic environment. The consequences of this project can be traced until today with the adoption of regulations and legislations concerning noise and preservation of *soundscapes*. Additionally, the elaboration of detailed sound maps made by urban planners, architects, and acousticians measure the acoustic conditions of a specific area, a district or a city.

Interpretations of past urban *soundscapes* based on ‘legibles’ could be approached now with the support of new technologies. One remarkable example is *The Sound of 18th-Century Paris*, a 2015’s audio-visual recreation of the background sound environment of central Paris made by the musicologist Mylène Pardoën —and a team of historians, sociologists, specialists in 3D representations and researchers of virtual reality—.

Based on documents like the detailed *Turgot Map* of Paris made by Louis Bretez between 1734 and 1736 and *Le Tableau de Paris* (published from 1781 to 1788), by Louis-

Sébastien Mercier:

... a pioneering urban ethnographer ...[that] aspired to include all of Parisian life in his pages: the rich, the poor, the youth, the old, men and women, police and criminals, priest and philosophers, even the animals, from carriage-horses to canaries, that shared the banks of the Seine with the six hundred thousand or so human inhabitants of his day ... Paris as a whole —its streets, its markets, its churches, its jails— and the constant flow of activity that connected all its parts (Popkin 1–4).

Pardoen chose to recreate the sound of the Grand Châtelet district, between the Pont au Change and Pont Notre-Dame bridges. The musicologist explains:

I chose that neighbourhood because it concentrates 80% of the background sound environments of Paris in that era, whether through familiar trades—shopkeepers, craftsmen, boatmen, washerwomen on the banks of the Seine, etc.—or the diversity of acoustic possibilities, like the echo heard under a bridge or in a covered passageway. (Cailloce)

This sonorous landscape of the everyday's Parisian life of XVIII century is a good example of the sound of history recreated through ear-witness descriptions that have captured their own place and time. Although researchers have achieved in some cases accurate mental simulations, re-creational models or representational devices, these interpretations of 'reality' reveal the impossibility to reproduce the past.

Prior to sound recording, the strategy used was to capture sound through letters, words and symbols. Most of the captured sounds were musical sounds but there are also other types of sounds that were represented. The means on which these inscriptions have

been found are very diverse. For example, the MS2340, the earliest record of music and musical instruments found to date. It is a cuneiform script that dates from 26th c. BCE. This Sumerian on clay script is a “lexical list primarily of words related to music, which listed 23 types of musical instruments and 9 types of musical strings” (Civil 203–14). The list describes also among other, things like copper utensils, domestic animals and weapons. This ancient glossary that defined terms and presented music is one of the strategies used by scholars to approach the sound of past centuries, on this case full of lyres, harps and hymns.

A later example is the Bible, where sounds were captured with words in Hebrew, Aramaic and Greek. In 64 of it verses the word trumpet was mentioned; the voice of the trumpet blowing in cities. “Trumpets sounding for a memorial when people went into battle. Trumpets used for calling assemblies. Trumpets in time of danger” are some of the thematic categories that the Bible Scholars (*64 Bible Verses about Trumpet*) classified as uses that have the trumpet in the bible.

In (*The New American Bible - IntraText* 2 Chronicles 5.12) “the ... singers, ... clothed in fine linen, with cymbals, harps and lyres, stood east of the altar, and with them a hundred and twenty priests blowing trumpets”

Imagine here the acoustic space invaded by the sound of the trumpets, not only the space where the priests are but also the outside and imagine how far the sound of one hundred and twenty trumpets being played at the same time can reach, maybe it could be a sound that would pause all activity for hundreds of meters at least.

Another example of sound captured in symbols is the manuscript known as the Cambridge Songbook Ms Gg.5.35, a compendium probably produced in Canterbury in the 11th century, with two quires at the end of the book which contains a collection of texts set to music that according to Dr Benjamin Albritton from Stanford University:

captures three lenses on medieval notation ... that gives characteristics of musical notation that range from the 9th through the 11th century ... in an early musical writing style you simply have indications that there are notes above these syllables, they don't possess any qualities that would allow you to determine pitch ... [or] to determine rhythm [then] ... we can start seeing how people in the 10th century were thinking about things like conveying the information, including pitch and rhythm, that were missing in that earlier style ... laying out those tones and semitones, in a vertical arrangement which should be very familiar to us ... Each line here represents a step in that scale. ... you have ... words essentially moving through what's recognizable as a falling, and then rising, falling, rising, and falling melody. ... the third example. ... we saw ... the space now between the text being utilized for the musical notation, ... Now ... the text with a blank space in between, and ... utilizing that space in the vertical fashion so that you can actually see the upwards and downwards movement of the melody as you move through. ... So you really can see the chronology of musical complexity ... (fifth session).

This interesting manuscript with the evidence of the gradual evolution of musical notation shows the difficulties of performing or reproducing sounds over and over again with accuracy. Often, reconstructions of past musical performances face the problem of ambiguity due to lack of information, for example tone information. Until the 12th

century reproduced music was “relying on aural traditions and the memory of musicians to keep them alive” (‘First Performance in 1,000 Years’).

Once the graphical music notation code was set, it was also used for other sounds. For example the *Scale of Vociferation* (Figure 1-2) is a detail in *Credulity, Superstition and Fanaticism* a 1762, engraved by William Hogarth depicting a group of people listening (on the ground floor) to a preacher standing in a tall pulpit with his mouth open. Next to the preacher and at the top right of the image it is possible to see a vertical rectangle resembling a cartoon speech balloon indicating that the preacher "shouts" instead of "talking" the words uttered in his sermon. The scale implies that it is about an instrument that indicates values from zero to one hundred, where zero is the natural tone of the human voice and one hundred is the roar of a bull. It can be read as an archaic decibel meter that measures the maximum voice level that is possible to reach without the aid of amplification. It is an engraving with 'sound', depicting also a room full of people talking at the same time.

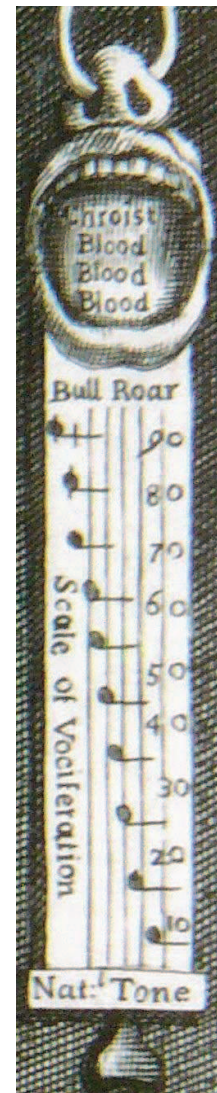


Figure 1-2 Detail of the Scale of Vociferation

Two versions of this engrave were made by the artist. Left: *Credulity, Superstition and Fanaticism* 1762 - (*The Engravings - Hogarth__The_Engravings.Pdf* 255). Right: detail of the Scale of Vociferation by William Hogarth in the version of 1761 – *Enthusiasm Delineated* (Hogart). In both versions the scale was depicted in the same size.

On the other hand “the high elevation of some pulpits above their congregations in the days before electronic amplification provided better acoustics for the minister’s voice to reach all in attendance” (Waugh). With a distracted audience a minister can be anxious trying to spread his message, the roar of a bull seems to be (according to this engrave) the logical pattern of measurement in terms of loud sounds around 1762.

Before the invention of motion images with sound (1927), one of the strategies used to add sound was to insert a graphic of a musical score somewhere in a picture. This is the case of *Im Etappenquartier vor Paris* 'A Billet outside Paris' by Anton von Werner (1870/1894). It is an oil painting on canvas of 120 x 158 cm, currently located at the *Alte Nationalgalerie* in Berlin. This painting shows a short musical score (Figure 1-3) at the bottom of its frame. Often this painting is shown without the musical score beneath, in a 'mute' version. To omit it makes the art piece incomplete. Only if one contemplates the whole painting with the notes on the frame, one can see it and hear it, perceive it as a whole.

"According to Werner's notes, they were singing Franz Schubert's setting of Heine's poem *Das Meer erglänzte weit hinaus* 'The Sea Shone Resplendent far into the Distance', which, as he added, was very popular with all the military bands at that time" (CHDI).

Images with accompanying sound (or in the case of the painting with a melody) are strategies used of easy remembrance for the spectators of its time. For a spectator of another époque 'to listen' the picture requires an extra effort to decode the *painting soundtrack* and its meaning, which is not the case for a viewer of its time.

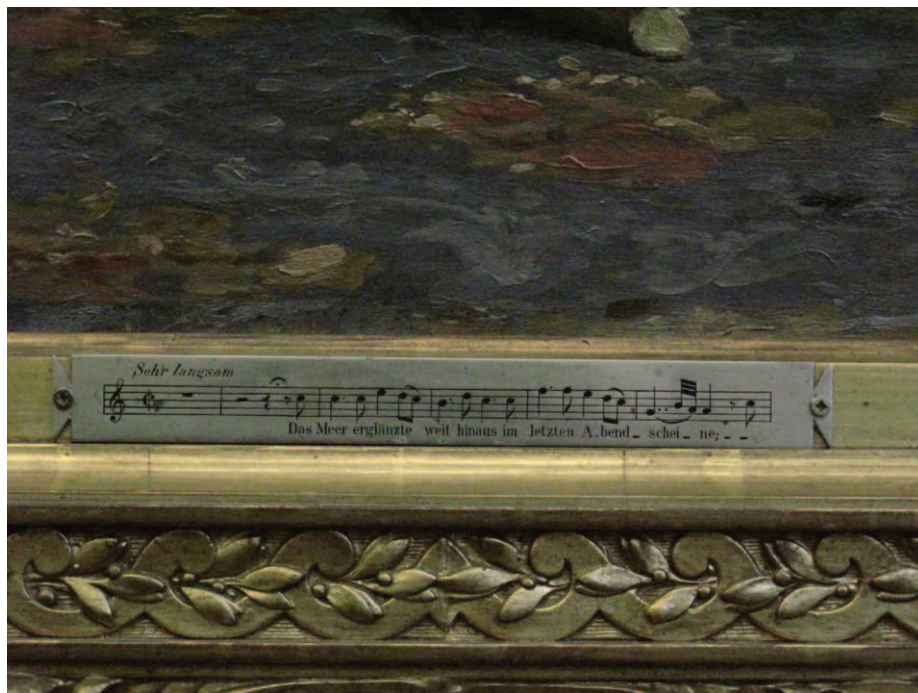


Figure 1-3 Detail of A Billet outside Paris

'A Billet outside Paris' by Anton von Werner (1870/1894). Up: Painting with frame (©Photo: Steward). Down: detail of the musical score on the frame. (©Photo: created by the author) *Am Meer*. 2012. JPEG file.

Once the viewer decodes the soundtrack a new layer of its narrative emerges. The poem² depicts a nostalgic dialogue without words of a couple in love who contemplate the sea on the horizon in a sad goodbye moment. It is not the scenario depicted on the painting, in which a group of soldiers are singing around a piano in the heat of a burning fireplace. The use of this 'soundtrack' does not represent a realistic moment; it can add new layers of meaning overcoming spatial and time boundaries.

Its performance by military bands reinforces the possibility that this song/poem could be considered as a *soundmark* of its time, since it could reach the acoustic urban and rural space.

With the passing of time, parallel to the traditional musical notation, a graphic notation (particularly after 1950s) evolves. A representation of sound in visual symbols that does not follow strictly the standard of musical representation, but that could also express sound and that can be reproduced afterwards.

Musical or no musical sounds "... observers tended to describe the sounds they heard in terms of musical language..." (Bijsterveld et al. 44). On stone, wood, paper or any

² The original poem: Das Meer erglänzte weit hinaus, im letzten Abendscheine; Wir saßen am einsamen Fischerhaus, wir saßen stumm und alleine. Der Nebel stieg, das Wasser schwoll, die Möwe flog hin und wieder; Aus deinen Augen, liebevoll, Fielen die Tränen nieder. Ich sah sie fallen auf deine Hand, und bin aufs Knie gesunken; Ich habe von deiner weißen Hand die Tränen fortgetrunken. Seit jener Stunde verzehrt sich mein Leib, die Seele stirbt vor Sehnen; Mich hat das unglückselige Weib Vergiftet mit ihren Tränen. (Heinrich Heine)

support imaginable, images that were silent can unveil their acoustic components. Sounds can be recreated and reproduced.

With the use of mathematical formulae, it is possible to represent sound in an abstract way. Representations of trigonometric functions like *sine* for example contribute to shape our actual perception of waves. With the passing of time and with the development of modern sound devices, specific graphical representations of waves began to be associated to sound, especially with non-musical sound.

Nowadays some people tattoo their skin with a graphical representation of a wave produced by the voice of a being that they want to remember. “The designs can be made up of any recorded sounds - whether noises, spoken words, music or a combination of these elements - which can they be tattooed onto your skin”(Mailonline).

The tattoo artist Nate Siggard, the inventor behind Soundwave Tattoos developed with his partner an app that can reproduce the sound of the waves already tattooed on the skin. Symbols that are converted to sound. They are *acoustic memorial tattoos*.

‘Legible representations of aural experience’ through time have constructed the ways we regard sound in the past and how we build our sonorous memory to project it into the future.

1.3 Collective and Communicative Memory

Julian Treasure, a scholar of sound, in a radio interview called ('How Sound Affects Us') made by Radio New Zealand said:

... the way your brain works is very affective by sound ... you only aware about what I am saying because you are remembering what I just said, so sound and memory are very, very close link together. You have to remember sound in order to understand it...

Recording and preserving audios in archives is different from preserving them through performance, or oral tradition. To enact, transmit and reproduce memory through oral tradition is something that can be traced back for example to events that occurred about 7000 years ago as the case of Australian aboriginals.

In such period of time, the accuracy of the transmission of the information can include exaggerations or distortions that open doubt to its reliability.

Researches like (Nunn and Reid) analysed oral stories and traditions from 21 places along the Australian coast, and found that the information and the geological evidence seems to coincide, opening the door to these narratives as 'live recording-memories' of the past.

The transmission and transference of memory and knowledge in oral -and literate- societies requires traditions and rituals to preserve the remote past shared by a collective. Assmann & Assmann define this matter as *Cultural Memory*. This type of

memory requires specialists or institutional direction. These *specialized carriers of memory* as they call them, turn this type of memory into a hierarchical structure where not everyone has equal access, and the ones that have access require a high degree of formation. This memory is characterized by its distance from the everyday with conceived fixed points of recollections that do not change with the passing of time.

Assmann & Assmann also proposed a parallel term, the *Communicative Memory*, which:

is non-institutional; it is not supported by any institutions of learning, transmission, and interpretation; it is not cultivated by specialists and is not summoned or celebrated on special occasions; it is not formalized and stabilized by any forms of material symbolization; it lives in everyday interaction and communication and, for this very reason, has only a limited time depth which normally reaches no farther back than eighty years, the time span of three interacting generations (111).

Assman & Assman introduced these concepts in their intention to dig into the concept of *Collective Memory* proposed before them by Halbwachs. *Communicative memory* will be then the synonym of *Collective Memory*, while *Cultural Memory* will cover those aspects left aside by Halbwachs "... from the realm of traditions, transmissions and transferences ... including the cultural sphere, which he excludes of the study of memory" (110).

The audio reproduced by acoustic monu-memorials encircles sounds from the *cultural memory* as well as from the *communicate memory*. A challenge for an acoustic monu-

memorial located in a public space, is to turn sounds related to *communicative memory* into soundmarks “achieving the goal of shaping the *cultural memory*”³.

Numerous narratives derived from *cultural* and *communicate memory* help us to understand concepts of identity in the city.

1.4 Staging Sound and Repetition

Once the technology to record sound and reproduce audio was available, the devices began to be located in public and private spaces. Radio stations and radio apparatus for example spread around communities and began to create other kinds of aural territories⁴. Through technology, the aural experience no longer had a direct relationship to what people actually see.

In 1924 the director of The Hamburg Norag station in Germany, Hans Bodenstedt “aired a radio play, *Im Hafen* (in the Harbour), which sought to draw on the »sounds of reality« (Geräusche der Wirklichkeit) as much as possible. According to Bodenstedt’s understanding, a *Hörbild* necessarily produces »a portrait that one hears« (Ein Bild, das man hört). It is therefore necessary that radio announcers had to learn how to create »sonorous portrayal« of the visual (Bild tönend malen) using speech, music or sound effects” (Bijsterveld et al. 137).

³ Interview with Prof. Hernandez. Oct 2017

⁴ For a deeper layer on this concept, see territorializing factor in the role of refrains in (Deleuze and Guattari) A Thousand Plateaus. Capitalism and Schizophrenia. Trans. Brian Massumi. London; 1998. p 311-327

Acoustic portraits made by radio programme began to ‘educate’ their audience in expectations on how the sounds sound, the ‘sounds effects’ practice is still used today in other technologies.

But, not only was the present the one that wants to be highly representational, the past, was also recreated with the help of dramatization or staging sound⁵. Recreating the past is necessarily an acoustic reconstruction done primarily through inferable evidence; the use of reconstructions can try to be as accurate as possible or just a theatrical dramatization.

Media is not always a good teacher. In 1993 it was possible to hear for the first time on cinema ‘real’ dinosaurs that chirp, roar and hoot. Paleobioacousticians⁶ agree that dinosaurs may not have been able to make any of these sounds. “Acoustic displays by non-avian dinosaurs were therefore probably non-vocal”(Senter 255).

Steven Spielberg (the North American filmmaker) had this information available in the moment in which he was working with his sound designer⁷ Gary Rydstrom on the soundtrack of his blockbuster movie Jurassic Park. Although he had the scientific data on his hands he was not convinced to use it because “the audience has to believe in order to take the journey”(Berry 164), the public expectations were fulfilled with a mix of sounds of different animals species like: tortoises, walrus, geese, among others.

⁵ See the analysis of staging of urban sound in historical texts, radio plays and fiction films for Berlin, Amsterdam and London made by Annelies Jacobs, Andreas Fickers and Jasper Aalbers (Bijsterveld et al.)

⁶ Paleobioacoustic is an interdisciplinary study field that combines the Palaeolithic period, biology and acoustic.

What we listen are sound metaphors, the predominant mirroring of sound to vision are not a realistic representation.

Repetition of certain audios through radio and films gave identity. After three Jurassic Park movies people 'learned' how dinosaurs sound. Memory has had its allies; radio and films and some new technologies like internet have contributed to the reinforcement of certain acoustic-memories.

Radio due to its nature has been the cause of the memory fixation of certain specific sounds to certain places. London became familiar with the repetition of the sound of the Big Ben's chimes since 1923 through BBC radio broadcast, which was the company that dominated for decades the acoustic space of British Islands. First locally and then internationally the sound of the Big Ben's chime is now an inherited *sonic icon* of the radio era, and an intangible sound heritage of our world.

The Elizabeth tower is a monument with an acoustic component, its Big Ben's chime re-shapes the acoustic landscape that creates identity and inclusion. Its chimes are a soundmark that represents London sonically and *audio-geographically* (Gallagher 468).

1.5 Moment of performance

Generally speaking, it is possible to say that the most external and primary organ involved in the process of sound perception are the ears. One possible approach to the process of sound perception is to analyze its shape, design and size. For example, if the

ear's shapes affect the way we listen, why we do not have a bigger cup shape or pointy ears?

Charles Darwin was intrigued also with the shape of our ears, especially after he saw a sculpture of a little imp with pointed ears called *Puck*, made by the British sculptor and poet Thomas Woolner.

Woolner also created and designed monuments, these were placed in public spaces like the statue of Captain Cook made in 1878 and currently located in Sydney to commemorate the discovery of the east coast of Australia.

But let's return to Puck's ears. In *Descent of Man and Selection in Relation to Sex*, Darwin credited to Woolner the discovery of a projecting point in human ears that can be an indication that human ears must have evolved from ape ears. He wrote:

The celebrate sculptor, Mr. Woolner, informs me of one little peculiarity in the external ear, which he has often observed both in men and women, and of which he perceived the full signification. His attention was first called to the subject whilst at work on his figure of Puck, to which he had given pointed ears. He was thus led to examine the ears of various monkeys, and subsequently more closely those of man. (22)

Darwin named this vestigial protuberance as the *Woolnerian tip* (283). Nowadays this leftover from evolution is known as the Darwin's tubercle.

Ears evolve to cope with the environment. The shape or the most external part of the ears called pinnae or auricula collects and enhances sounds that each particular species cares about, favouring a specific part of the frequency spectrum over another. In

human ears, these ranges are around the average pitch of our fearful predators and the human voice. Our ears were ready then for language and vocal music.

In past landscapes humans coped daily with predators and loudly voice experiences, in these landscapes not only acoustic perception was important. Learning and memory also played a key role in the behaviour and perception of the environment. They still play that role today.

Before the possibility of recording sound, the access to sound was direct, then, in order to recreate a sound, you need first to learn it and then to remember it. Probably the first time you remembered was fairly accurate and probably after, the next time you tried to remember again it will be a little distorted, “memory is often an unreliable narrator” (Lee Strachan-min 37:44). We gradually created a data bank of sounds and sound memories, shaped also through social interaction.

With the passage of time and the possibility of recording sound, to this sound-data-bank was also added the possibility of listening to sounds that were not direct and, as we all perceive different, the possibilities of ‘scanning’ a space were expanded exponentially.

To taste an urban space through listening or ‘acoustically scanning’ it, is important to focus on the *moment of performance* defined by Pistrick and Isnart as “where social interaction, the interconnection between space, sound and memories becomes evident” (508). The authors devote an entire article, *Landscapes, soundscapes, mindscapes* to the subject. This title poses others key words needed to have in mind to do the analysis proposed by this study.

The interest in this research is to deal with the intangible acoustic urbanity or in other words with the acoustic character made by the collective on certain places located on public spaces in the cities, without forgetting the physical objects—in this case, monuments and memorials—that unchain their acoustic-multidimensional space.

But the approach to this acoustic character is not an easy task especially if a researcher intends to cover the time since man inhabits the cities. Each city has its own special multisensory characteristics and the acoustic phenomenon and its perception in a specific moment depends on the materials in which the context is constructed. The studies of old sounds that take into account the streets, the building materials, and the use of each building placed in a street, emphasize the differences between the past and the now.

Researchers can only infer how was this *moment of performance* through the physical evidence still available that can be measured and studied.

Take for example the study of the acoustic properties of building materials made by Jeffrey D. Veitch in the archaeological site in the city of Ostia (Italy), where building techniques change the auditory experience. Through modern measurements the researcher found that the amount of sound energy that passes through materials suffers a loss of 2dB when using the ancient construction technique *opus reticulatum* (67dB) instead of *opus incertum* (65dB). (Veitch)

The deeper understanding of this physical evidence allowed Mr Veitch to glimpse the meaning (for a Roman citizen) of street noise. According to the results of the research,

street noise was a product of street activity and internal space, underlining the relation between the concepts of public and private in Roman understanding.

“ Sounds from the main reception room could be heard in the street at certain apartments ... inside noise being heard outside”(Veitch).

For a contemporary inhabitant of our cities, street noise indicates disturbing sounds taking place on the streets, outdoors, rather than inside a building or in an internal space.

This difference points out the difficulties in making generalizations over time about concepts such as street noise, public space and private space.

Although sound recording is not very old (1877) this study will concentrate on the memorials and monuments produced under the digital recording era of captured sound. For the purposes of this research, that is from 1971⁸ with the first commercial use of digital pulse-code modulation technology to the present.

⁸ Despite 1977 looks to be a better choice because the Sony PCM-1 — the first commercially available digital audio recorder— was introduced, I chose 1971 when NHK and Nippon Columbia also known as Denon in Japan, released in January 1971/1972 the first two digital recording commercial albums: *Something* by Steve Marcus and *The World of Stomu Yamash'ta* by Stomu Yamash'ta. (Fine)

2 Sound and Urban Experience

"Tell me the landscapes in which you live
and I will tell you who you are" (Ortega y Gasset 101)

Paths, edges, districts, nodes and landmarks are according to Kevin Lynch the five elements that help individuals to orientate themselves in urban situations, and to build their *image of the city*; "Districts are structured with nodes, defined by edges, penetrated by paths, and sprinkled with landmarks"(48-49). The empirical categories which it has been possible to group a mass of information ... whose parts will be perceived only in context"(109). In this scenario, citizens use an interplay of senses in the construction of their city-image: textures, flavours, contrasts, smells, vibrations and sounds among others. In auditory terms the perception of: sounds, noises, audios, silences, echoes,

earworms, vibrations, speech and music are the elements that shape the acoustic ambiance of the city and help individuals build their auditory-image of the city.

The interconnections between these elements with its acoustic properties in addition to the experience of the citizens by hearing them can be for the purposes of this research transferred into acoustic partners: Acoustic-*districts*, acoustic-*nodes*, acoustic-*edges*, acoustic-*paths*, and acoustic-*marks*.

Acoustic categories have already been defined by authors like Barry Truax and Murray Schaffer.

With all due caution, one might say that acoustic-*districts* could resemble what Truax defined as *acoustic communities*, defined as:

any soundscape in which acoustic information plays a pervasive role in the lives of the inhabitants ... the boundary of the community is arbitrary and may be as small as a room of people, a home or building, or as large as an urban community, a broadcast area, or any other system of electroacoustic communication ... acoustic cues and signals constantly keep the community in touch with what is going on from day to day ... (58) ... the rules by which the acoustic community functions are fundamentally altered by the introduction of technology ... the members are fragmented into subgroups in which they do not necessarily share the simultaneous experience of a specific sound (178).

The *thematic continuities* are woven through sounds. Inside of the acoustic communities other categories appear —continuing in the vein of Truax—

Acoustic-*nodes* could be transferred as *sound signals*. “...sound signals form an acoustic link to other communities when their profiles intersect (60)”.

Acoustic-*edges* could be transferred as *acoustic profiles and acoustic horizons*. “...each [sound] signal has its own *acoustic profile* which is the area over with it may be heard ... essentially define the acoustic boundaries of the community(59–60)”.

“... the *acoustic horizon* ... comprising the most distant sounds which may be heard in a soundscape (60)”.

Acoustic-*paths* could be transferred as *sound signals* defined as: “... those sounds which stand out clearly against the ambient noise background ... those which are intentionally designed to communicate information, such as whistles, bells, horns, sirens, guns, and so on (58) ... [and] contains information about its source, its context, and its environment (61)”.

Acoustic-*marks* could be transferred as *sound signals, keynote sounds and soundmarks*

...often ... sounds [signals] are unique and of historical importance [that] allows them to be regarded as community soundmarks (by analogy to landmarks) ... (Truax 59).

... keynote sounds ... sounds to be heard in background listening ... that ... are a usual occurrence, and therefore expected and predictable. They may be singled out for attention if the need should arise, but normally they aren't specifically noticed ... keynote sound may be part of the ambiance, i.e., at a low, constant level ... sound that stands out in an environment and is clearly distinguishable from the ambient noise (Truax 21–22) ... [and have the] special ability to become associated with long-term memories... they create an extremely important continuity with the past (Truax 59).

Kevin Lynch's study “showed that public space was the principal element from

which people derive their representations of a city” (Tonnelat 3); and paraphrasing him in acoustic terms one could say: *Acoustic communities* are structured with *sound node signals*, defined by *acoustic profiles* and *acoustic horizons*, penetrated by *sound path signals*, and sprinkled with *acoustic marks*.

The acoustic fabric of the city —where its inhabitants with their motion’s itineraries, cultural and social relationships, compose a continuous flow— can be alterable, interrupted and disrupted. By interacting with the city its inhabitants give meaning to the acoustic elements, either through innumerable steps in the practice of walking with a goal or without it as a *flâneur*, or using any means of transport, even through virtual and mental navigation.

Surfing the elements of an *acoustic community* in their public spaces and observing through active listening is the desirable scenario to catch the sound imprints of a place.

The most useful meanings of these five visual elements into acoustic transferences lie in the opportunity to utilize them as powerful tools for architects, urbanists, landscape planners, artists, designers, sociologists and other professionals to create and plan *monu-memorials* that are not only one object located in one place or a commemorative place with several group of related objects. With this open vision, the creator can imagine *monu-memorials* as sprinkled interventions in a specific area of a city, think of them as a conspicuous moving element that leaves an acoustic path, defines acoustic boundaries of a community, or acts like a lighthouse sending signals or intersect with other communities through sound. These tools might lead to new forms of remembrance,

commemoration, and construction of the image of cities giving the possibility to expand the spatial character of *monu-memorials*.

2.1 Sound and Power

When radio was invented ... two models of broadcasting grew up: the political model, born of the rage for power; and the 'enlightenment' model, born in opposition to it. Hitler gave us a vivid illustration of the first type when he wrote: 'We would never have conquered Germany without the loudspeaker.' (Schafer, 'Radical Radio' 207).

In the 1997 film *La vita è bella / Life is Beautiful* by Roberto Benigni one of the sequences shows the main character - Guido Orefice - using an audio device to transmit a message to his wife. The device is installed in the radio room or Funkraum, a place exclusively for the use of German soldiers in charge of the concentration camp. Mr Orefice and his son (Giosuè) enter the room illegally without being noticed. Taking advantage that there it is unoccupied, and then the father switched on the microphone and greets his wife who is also detained with other women in another section of the camp. The subsequent shot shows loudspeakers around the camp as well as his wife listening to her husband's and son's voices. The audio message travels through the loudspeaker system and is listened not only by the intended receiver, but by the whole concentration camp acoustic community.

A private message is spread in the 'acoustic public space' using private power tools of a theoretically private acoustic space. Sound travelled through walls and limits ignoring human borders. Sound is hard to contain, even when people can be contained, it is difficult to privatise the sonorous public space. The ones that own the acoustic devices to reproduce sound can monopolize and decide what kind of content will be played. Murray Schafer mentioned the concept of *Sound Imperialism* and wrote:

When sound power is sufficient to create a large acoustic profile, we may speak of it ... as imperialistic ... a man with a loudspeaker is more imperialistic than one without because he can dominate more acoustic space. A man with a shovel is not imperialistic, but a man with a jackhammer is because he has the power to interrupt and dominate other acoustic activities in the vicinity... (*The Soundscape* 77–78)

Some places are less public than others, shopping centres, elevators, train stations, electric stairs have an acoustic space dominated by the 'officially' responsible and has a narrow policy about louder and un-official sounds. This regulation turns stricter in places like museums, libraries and areas around hospitals, only to name a few.

On September 24–25, in the context of the 2009 G-20 Pittsburgh meeting, USA police presented a new device in order to maintain the security of the heads of government that arrived at the convention. On this occasion the USA police displayed a new weapon known as LRAD —Long Range Acoustic Device— or sound cannon, to disperse the crowd if necessary. This weapon produces a high beeping-sound, in the threshold between the point when humans start to feel sound as a painful sensation, and

the point where it is not possible to hear other sounds like human voices. Basically this weapon is used to “drown out human speech and to temporarily deafen anyone within close proximity (Jowett).”

The LRDA can also transmit vocal messages in different languages; it is so effective that it can be set in the corresponding language according to the occasion, avoiding the problems of translation when it comes to dissolving a demonstration with foreign and local participants.

It is a ‘clean’ weapon to control population, no beating, no bloodshed as the result of the excessive police force. In general, citizens are not allowed to make loud sound or noises, one opportunity to produce them are precisely in protests or riots. Although long term and frequent exposure to this kind of high frequencies can produce physical damage, “the state has the option to use militarized sound against its citizens (Jowett)”. “It is a matter of having the authority to make it without censure (Schafer, *The Soundscape* 77)”.

The use of sound against others is intended to demoralize them, to break their will to fight, or their resistance, it is not a new strategy. Psychological warfare was also used in the sixties, when East and West Germany began to use ‘noise weapons’ to interfere with speeches and parades.

Red propagandists have been fond of trumpeting Russian martial music or Communist party songs over the wall into West Berlin, particularly at times when it would interfere with public gatherings ... the West Berlin government ... reply to the East in thunder-sized tones ... *Studio am Stacheldraht* (Studio at the Barbed Wire), a mobile unit of four heavy trucks

and six Volkswagen buses, each bearing clusters of the latest loudspeakers. The noisemakers can be hoisted high in the air in a few seconds by hydraulic cranes and rotated so that they concentrate a decibel-packed message on one unhappy spot ... the beauty of the mobile horns is that each unit is a one-man operation. The driver of the truck can hoist and aim the speakers and control the sound. He can amplify his own voice through a microphone in the truck cab, pick up radio programs, blare tape recordings or he can broadcast any combination of recordings, radio and voice simultaneously (Gunter).

These sound cannons and mobile unit trucks are 'cheap' and 'clean' devices. The use of sound as a weapon-strategy is so effective that even since pre-Columbian times the use of sound could be traced. Despite the exact original use and purpose of *Death Whistles*, these have been lost due to the lack of information, the sound that they produce could have been used during battles to strike fear into their enemies. The *Death Whistles*, as they are known have a shape of a human skull and its sounds are like someone lamenting or suffering terribly; a deep and 'frightening' sound.

These pre-Columbian whistles or dead resonators, despite its size (no bigger than the palm of a hand), could like the sound cannons and mobile unit trucks reach considerable distances. According to the studies of Roberto Cabrera Velazquez, these wind resonators can "produce onomatopoeic sounds, that resemble the ones that some animals generate, and when they play in a group at the same time, they can produce very complex sounds and generate special effects (186)".

A couple of these whistles were found in the entombment number 7, within the ceremonial complex located in front of the platform of access to the Temple dedicated to the air and winds god Ehécatl. The archaeological zone was documented by Salvador Guilliem Arroyo in 1999 who described the find of a man that “was buried with two whistles with the face of death: one in the thorax and the other held with his left hand on the pelvis (165)”, they had “a globular body, tubular nozzle straight and with a perforation to hang the whistle (427)”

If it would be possible to hang these whistles, it is possible to imagine a group of people with whistles around their necks playing in unison a sound that discourages the possible attackers or to imitate numerous animal calls, or strong winds or huge storms. The whistles were effective and portable and

the tube of the mouthpiece ... can sustain itself with the lips and / or the teeth, which allows to leave the hands free for other uses ... or to handle at the same time another artefact. The tubular embouchure also allows to operate two whistles at the same time, because its two tubes fit between the lips (Cabrera 195).

These studies also show that whistles make infrasounds that produce altered states of consciousness and hallucinations; this recalls the sound weapon shown in David Lynch Dune's 1984 science fiction film in which a sonic weapon is controlled by the low register voice of the protagonist, a weapon that allowed him to cover long distances and to gain advantage against a large enemy army.

Another aspect on which the authorities have rules to produce sound in public spaces, are the regulations that must be obeyed by street performances. Germany for example has regulations about where is legal to busk and how to get a permit; there is not freedom in the streets, Buskers or Street performers usually have to go to the City Hall make an audition and then pay to obtain a permit to perform. Horns, drums and amplifiers are not regularly allowed.

In Freiburg for example

you don't need a permission to perform, but still there are some rules you have to follow like during the week Monday - Friday don't play from 12pm-3pm and not before 9am and after 6pm. On the weekends you are allowed to play at one spot around 45 minutes than you have to switch the place so every busker has a chance for a good spot (Busking Project).

The role of the state to regulate censorship and normalize acoustic public spaces is very old, not only in the production of 'loud' sounds but also on its contents:

In Rome, some rebellious minstrels performed poems and songs that contained negative lyrics and criticized rulers. Consequently, the first recorded street performance in western history was the result of a legislation passed in 451 BC, known as The Laws of the Twelve Tables. This law prohibited against the singing or composing of "Libelli Famosi" which put in lay terms means that singing about, or making parodies of the government or its officials in public places was a crime, with the penalty being death (Buskerworld).

The narratives embedded in speech and non-speech audio convey information that shape our image of the city, audios and memory help citizens to construct their narratives, their history and identity. “Sound has even much stronger capacities to territorialize that sight (Pisters 122) ... »Flags can do nothing without trumpets« (Deleuze and Guattari 348).” but despite the “socio-political power-relationship [involved] sounds ... participate in making more flexible our notions of locality, authenticity, belonging, identity and nationality (Pistrick and Isnart 508).”

2.2 Public Spaces

Erving Goffman in 1971 defined the “public spaces are the realm of unfocussed interactions between anonymous strangers (Tonnelat 5)”.

In the section of *Inclusion through access to public spaces* Unesco point to:

a public space refers to an area or place that is open and accessible to all peoples, regardless of gender, race, ethnicity, age or socio-economic level. These are public gathering spaces such as plazas, squares and parks. Connecting spaces, such as sidewalks and streets, are also public spaces. In the 21st century, some even consider the virtual spaces available through the internet as a new type of public space that develops interaction and social mixing (UNESCO).

Despite the restricted or controlled access that some urban public spaces suffer, sound is an element that cannot be easily enclosed as desired. The challenge lies mostly in how sound spreads around, going beyond the private and public limits.

The realm of these unfocused interactions is a space full of sounds, and it seems almost impossible to design spaces where the acoustic space of each single person is guaranteed.

In theory, all kind of sounds can trespass and become public. The borders of sound are not only the physical limitations in its propagation, transmission and perception, but also its specific social and cultural constructed limits. Sound influences the way a person feels. Depending on sound restriction and control, the perception of public spaces changes.

The nature and character of sound in urban public spaces can help to shape symbolic boundaries, the articulation of these boundaries shape *acoustic communities*. Sound helps to establish everyday contacts that shape a sense of belonging.

The kind of sounds that can be heard on these urban public spaces also depends on the way we navigate them. “The contact that is made between environment and human senses is defined by the ‘skin’ or bubble of the vehicle in which we sit (Westerkamp)”. The nature and amount of sounds in walking, biking, driving or using another ‘bubble’ could be substantially different from one person to another even in the same place and time.

The acoustic urban experience is shaped with sounds that could be direct or indirect, sounds produced by others or by myself.

The sonic thinkers and artists O+A [Auinger & Odland] define the Sonic Commons as “any acoustic ambience that human beings share with one another and in which anyone

can become an ‘earwitness’ to the actions of the others”(Ars Electronica Programflyer 2011 and O+A) “both intentional and unintentional ... The Sonic Commons is a complex multi-user environment leaving an accidental soundscape as by-product (Auinger) 64).

Urban public spaces are one type of Sonic Commons, are urban acoustic public spaces, with soundscape signatures.

The intentional sounds produced by acoustic memorials altering the surrounding environment, changing its perception. These sounds are part of the urban soundscapes and contribute to the multidimensionality of urban public spaces.

Only eight years after Richard Wagner used the term *Gesamtkunstwerk* ‘total work of art’ in two of his essays⁹, the first sound was possible to be recorded (1853), in which his ideals of unifying the different arts via theatre are projected. It is possible that sound acts as a binder to build a ‘comprehensive artwork’.

Can visitors establish more empathy with a specific monu-memorial if it stimulates not only the eyes but also the ears? The German word *Gesamtkunstwerk* might help to understand how sound can be used to emphasize the immersion of the visitor into the work of a creator. In the case of monu-memorials, sound has the ability to recall memories and open sources of remembering that maybe the visual forms alone cannot achieve. In 1848 Richard Wagner sought the integration of architecture, sculpture,

⁹ Art and Revolution and The Artwork of the Future, Richard Wagner, 1849

painting, poetry, dance and music for a common purpose, in a way that cinema would provide at the end of the 19th Century until nowadays.

2.3 Urban Identity

“One of the most important elements in the processes through which people come to imagine themselves as sharing a particular identity, including national or cultural identity, is the reproduction of a shared memory of the past (Mills 14).”

The production of this shared memory begins with an individual process of perception in which visual elements are only one part of the spectrum: smells, textures, flavours and sounds in the companion of experiences intervened in the creation of these coherent whole. As Hernández states as a “world of sense’ understood as an instance of experience in which different modes of verbal and non-verbal languages reinforce similar contents, thus generating a condensation of meanings that can naturalize behaviors and guide human action” (58).

Nasr and Majedi (Figure 2-1) proposed as constituent elements of urban identity the ‘human interactions’ that occurred in the ‘urban architecture’. As sound is one of the strategies that cities use to communicate with their inhabitants, the ‘voice’ of the city helps locals and tourists to create urban cohesion through the constant reproduction of its sound: Numerous representations of identity that pretend to have a unitary shape.

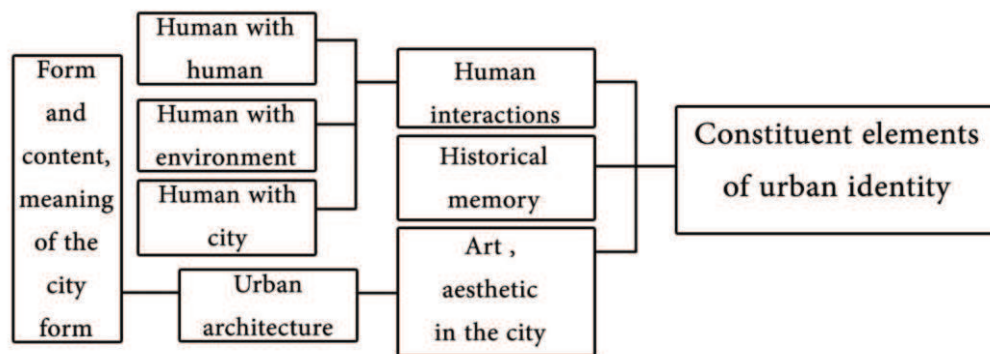


Figure 2-1 Constituent elements of urban identity

Elements that mould urban identity by Nasr and Majedi.

Source: (qtd. in Solatzadeh and Baghaei 23)

Lalli defines:

Urban Identity as part of a person's more comprehensive self-identity is the result of a complex association between self and urban environment. The town becomes a general symbol of the host of an individual's personal experiences. It is, however, not only a simple reflection of these experiences but also provides the person with a sense of subjective temporal continuity which becomes gradually independent of this background of concrete experiences (308).

Urban identity is also shaped through sound. The use of sounds by monu-
 memorials intentionally leaves sound imprints, shaping this continuity mentioned by
 Lalli. The analysis of different approaches of acoustic monu-memorials can provide us
 with an ear to listen how memory (and history) are presented and staged in public spaces:
 acoustic monu-memorials as sites of urban memory that shape urban identity.

2.1 Local Sonic Identities

Unesco inscribed in 2009 in the list of Intangible Cultural heritage of Humanity the *Silbo Gomero*, a whistled language used in the island of La Gomera (Canary Islands). This form of communication “is used to transmit news, to announce celebrations and funerals, romerias or pilgrimages, weddings and baptisms. It is not a language to be created privately, it is for the public, for what must be said out loud and can be heard by all (UNESCO et al. 4:11)”; In northern Oaxaca (Mexico) people whistle the *Chinantec* language.

These two separated landscapes (La Gomera and Oaxaca) had in common mountainous terrains with scattered settlements where whistles can reach long distances, up to 5 kilometres. Conversations made on these languages occur on landscapes with ‘favourable’ acoustic performance and hypothetically took place without many ‘earwitness’. The whistles travel far and fast through the landscape, allowing effective communications and creating a sonic identity of these places. “Spaces seemed more meaningful and could be perceived more clearly when subjects could hear echoes of their own sounds (Southworth 55)”. The inhabitants of these areas are involved in an acoustic sphere that lets them identify themselves as part of a community.

On the other hand, another part of the character of our cities is shaped through “the split between an original sound and its electro acoustical transmission or reproduction ... we have split the sound from the maker of the sound (Schafer, *The*

Soundscape 90)". The sounds of the real and the sound of audio experimentation coexist in public spaces. "sounds ... as being placed and as existing beyond place (Pistrick and Isnart 506)"

Places designed to play audios are usually places that are enclosed with a roof, made with materials that permit desirable acoustic qualities.

The *Sonic commons* on urban public places occurs mostly where decent acoustic properties are harder to achieve, on these spaces the:

Spatial experience ... incorporates a certain auditory knowledge. This pronounced interconnection between sound and place implies that sounds take actively part in the social construction of our spatial and temporal environment ... sounds must be considered a key element in the distinction between a topos (place) and space, between the physical space and the socially inhabited place (Pistrick and Isnart 506).

On the physical infrastructure of public spaces, the sonic commons take place, the producers and receptors of these sounds elaborate its meaning and give them an identity. The accidental soundscape produced as by-product can be not so fortuitous, "the challenge is to craft meaningful and effective links between the tangible—sound levels and decibel values—and the intangible, multidimensional nature of human perception (Kenneth D. and Nicholas P. 36)."

In this separation of the sound from the maker, the auditory knowledge and the social construction of our spatial and temporal environment entered in the scene, as well

as the initiative through Internet in the creation of sound archives as sonorous cartographies. Everybody with an acoustic environmental concern has the possibility to record, store, establish links between sounds on a map and publish them. The maps show diverse approaches like sounds in cities, neighbourhoods, rivers, walls; even the arctic is part of the list. Most of the maps are made in present times and have descriptions and references of how a city could have sounded in the past centuries. The results are really broad; one compilation¹⁰ made in 2014 by Chistina Martí about sound maps available on the Internet brought 31 examples in Europe (20 only in Spain), 26 in the rest of the world and 8 related to other initiatives.

The maps are interactive collaborative platforms where everybody is invited to listen, download and make new recordings in situ. In some sites, audio can be listened to not only individually, but also arranged and rearranged to create a new mix of sounds.

Despite the name acoustic monu-memorials implies a focus on sound, the concepts developed in the previous sections remark the opportunities of designing spaces of memory and commemoration having in mind the immersive experience of the visitors and the complex associations between urban environments, social interactions, and aural perception.

¹⁰To have access to the complete list and links, see (Martí) *Mapas Sonoros: un Mashup de sonidos cotidianos. Papeles de Música*

3

3 Methodology

“There are no more obvious markers of
memory in a city than its monuments ...” (Crinson xvi).

The overall purpose of this research was to appreciate acoustic monu-memorials located in public spaces as one of the tools to approach the acoustic character of our cities. On the one hand, this included an identification of acoustics monu-memorials, where they are, how they are. On the other hand, it involved research on how these monu-memorials deal with the challenges involved in playing audio in public spaces and on whether the general public has started to participate in the creation of this new ‘devices of memory’ as well.

In order to better understand the definitions of acoustic monuments, memorials or commemoratives places, and to examine the complex roles audio interplays with the different factors that coexist in public spaces, I had formulated the following research questions:

_What are the different approaches that acoustic monu-memorials located in public spaces use to generate a collective acoustic experience of commemoration?

__Which are the media and components that acoustic monu-memorials located in public spaces generally use?

__What intentions are the acoustic monu-memorials usually envisioned with?

This chapter presents the research design, how the data was collected, and the data analysis procedures.

In a second stage and to outline two different approaches of acoustic monu-memorials, a case study is conducted with two permanent acoustic memorials located in Germany and Colombia - *Denkmal für die im Nationalsozialismus ermordeten Sinti und Roma Europas* (Monument to the Sinti and Roma of Europe murdered during National Socialism) and *Niche - Monumento a Jairo Varela* (Niche - monument to Jairo Varela).

Not only will practical procedures be presented, but reflections and considerations will also be discussed in the following.

3.1 Where they are? How they are?

The present investigation began with a closed question about whether there are monuments, memorials or commemorative places located in public spaces that use sound in their construction? Assuming in advance that by finding them, they would use audio as a primary tool to help us to remember, to commemorate or to make a tribute. With this first question and my artistic experience in mind, I decided to find examples of existing acoustic monu-memorials that allowed me to know the different strategies used in the creation of acoustic commemorative places, the way they create space and the way they approach memory.

I coined the term monu-memorials and it will be used in this research when it is necessary to encompass the entire range of monuments, memorials, commemorative places, warning monuments, counter-monuments, accidental monuments, tombs, memorial stones and all of the possible derivatives of these concepts in the construction of commemoration and remembrance, a way to encircle all the possible answers that I would find during this research.

My method for collecting the information was through an initial question that was developed with those from whom I received a response. These questions were conducted in the period between January 2014 – September 2017. I sent it using different means such as electronic mail, social media platforms and face to face conversations.

The initial question was send-in three different languages (German, English and Spanish), depending on the recipient's language.

Here the three versions of the evolving question:

° Kennen Sie eine Gedenkstätte oder ein Denk-, Ehren- oder Mahnmal, für dessen Gestaltung der Architekt oder der Künstler Töne oder Klänge als Arbeitsmittel einsetzt? Nicht als Klangspeicher (direkt aufgenommene Klänge oder Geräusche des Wassers, Maschinen, Tiere, usw.) sondern "als Teil einer kollektiven Erinnerungskultur"?

° Do you know a monument,-a memorial, or a commemorative place in which the artist or the architect uses audio or sounds as a tool, as an integral part of the monument? Sound that can be identify as a part of the sound memory of a collective.

The example can be located anywhere in the world and I am not interested in sound archives.

° ¿Conocen ustedes un memorial, monumento, lugar conmemorativo u obra artística ligada a la memoria colectiva en el espacio público, en Colombia o Latinoamérica? Lo importante es que el creador haya utilizado: el sonido

como materia prima, el sonido como tema principal, que emita sonido, o tenga algún tipo de relación con este.

Puede ser temporal o permanente.

Mi investigación no abarca los Archivos Sonoros o recopilaciones de sonidos de lugares o animales, música local etc., sino que busca encontrar que es lo que como colectivo recordamos sonoramente.

The question was sent mostly to individuals living in Germany, Austria, Great Britain, Switzerland, Spain, Russia, China, Mexico and Colombia, I sent the question to people with different backgrounds, studies and professions, on which were included: artists, heritage experts and social anthropologists; (see below below Figure 3-1 for details).

I chose to ask people with different backgrounds because I was also interested in knowing the different approaches to the notion of what can be classified as an acoustic monumemorial in the eyes of the general public that inhabits urban spaces.

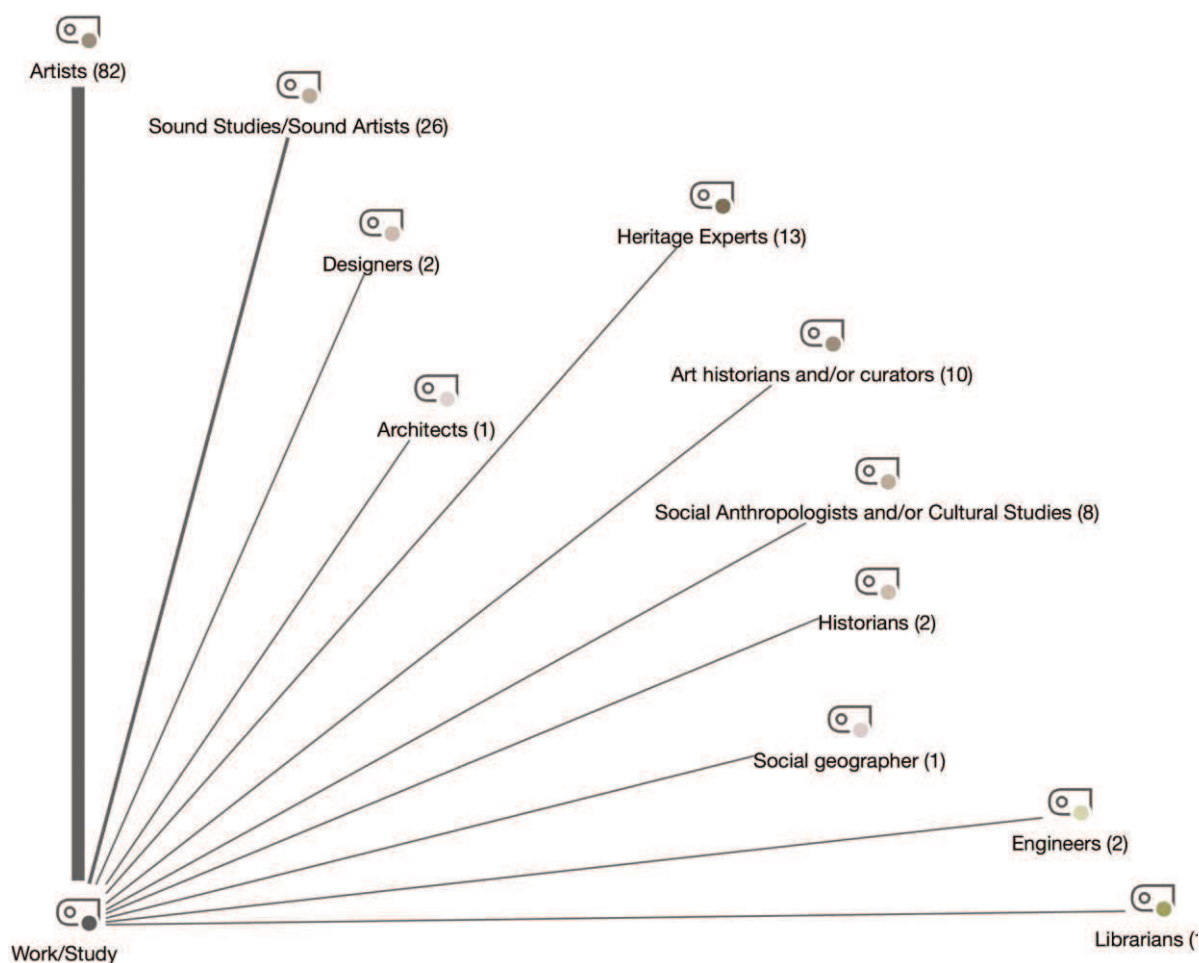


Figure 3-1 Backgrounds / Works / Studies

The figure shows the different backgrounds, work and studies of the 148 people that received the question. (Source: created by the author. 2018. Digital Image).

From the 148 people that received the question a total of 59 answered it. Of those 59 people, 45 sent examples in their answers (Figure 3-2 below). Adding them to the cases I found through my research a total of 110 examples of monu-memorials were collected, the complete list can be found in Appendix A in the appendices section at the end of this text.

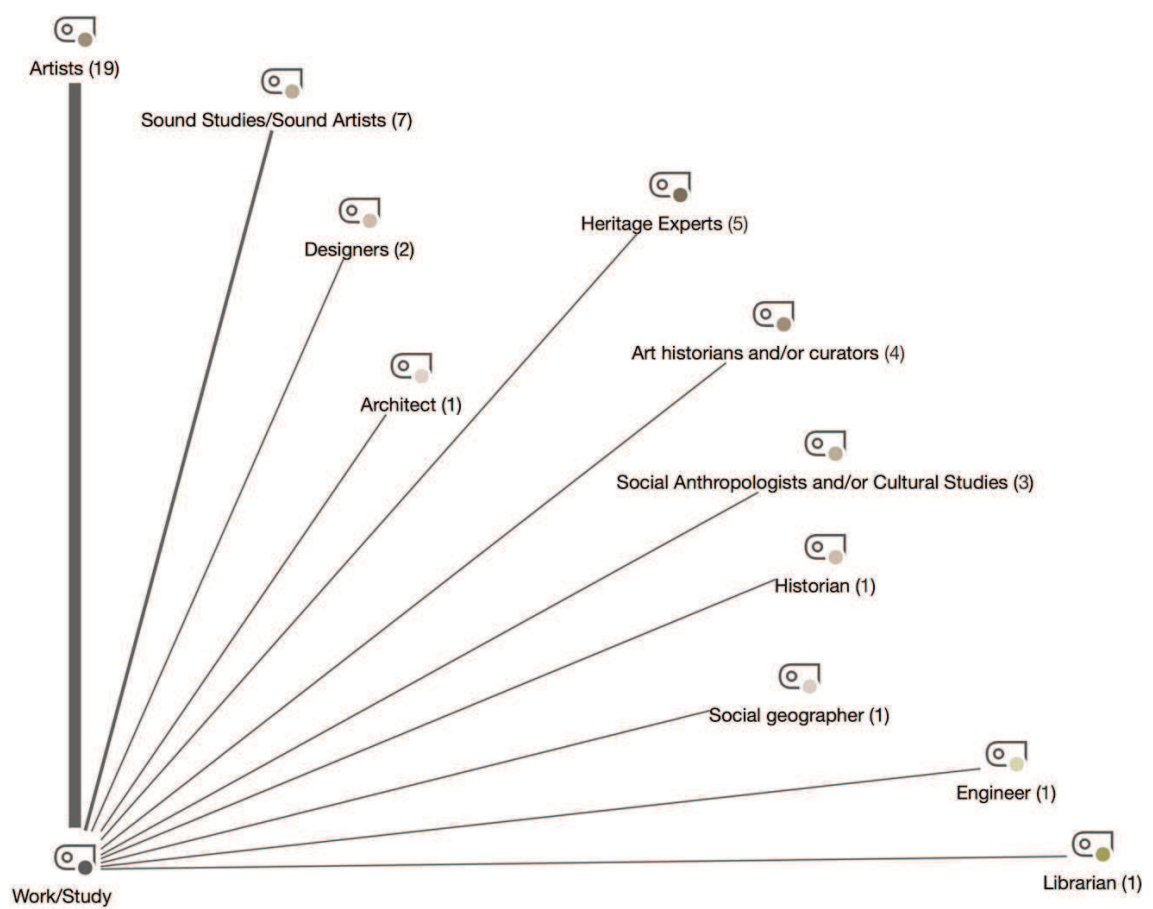


Figure 3-2 People that answered the question

Backgrounds of the 45 people that answered the question with examples inside. (Source: created by the author, 2018. Digital Image).

3.1.1 Different approaches

What are the different approaches that acoustic memorials located in public spaces use to generate a collective acoustic experience of commemoration?

The analysis of the responses showed the following typologies as the most recurrent on these acoustic monu-memorials:

temporal sound installations, musical compositions, works that work with archive material, sound sculptures, sculptures, permanent installations in museums and audio walks.

It should be noted that most of the examples sent were temporary sound installations rather than permanent commemorative places that play audio all day long. (See the complete table of classification below

Figure 3-3).

The appearance in the list of audio walks and works where sound is portable, as well as websites and downloadable apps expand the concept of acoustic monu-memorials and extend the limit of what can be considered as public space.

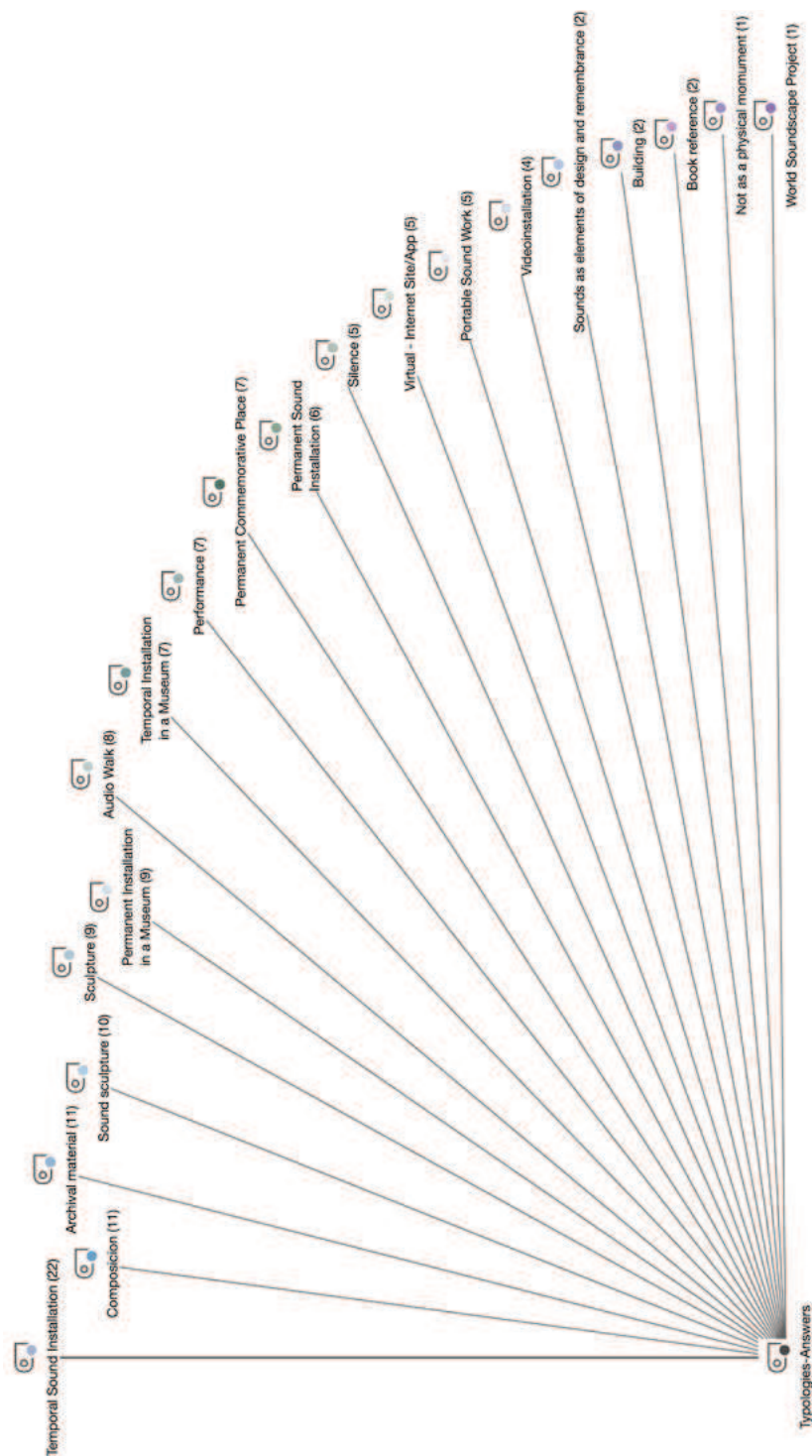


Figure 3-3 Typologies found in the answers received.

(Source: created by the author. 2018. Digital Image)

3.1.1.1 Asking the Heritage Experts

The present research began with a closed question on if whether monuments and memorials that use sound in its construction exist in public spaces. Once the first example was found and the answer to that question was affirmative, the question changed to which they are and where they are?

The strategy adopted to answer these questions was, to ask first heritage experts and, at the same time, to revise the UNESCO World Heritage List.

Academics began to answer kindly to my questions. At first some of them expressed that the information available about monuments or memorials that use sound was rare and sent me examples with limited public access located in museums or private cultural institutions.

One of these answers was: the use of the noise of a rolling gate in the museographical concept of the exhibition presented in the Stasihaftanstalt [Stasi Detention Centre or Ministry of State Security of the German Democratic Republic in Erfurt – Germany]. Today Gedenk- und Bildungsstätte Andreasstraße [Commemorative Place and Educational Centre Andreas street]. In version 2014 of the exhibition, the noise was used to recreate the experience lived by the internees, indicating the detainees that someone was admitted or transferred, and thereby increasing uncertainty in the situation, transferring that feeling to visitors; a bridge between the past and the present was created. Through this audio the spectator was placed in the position of a detainee, a bridge that

should create consternation in the viewer, to think about it and transmit remembrance through generations.

In another response, an example that fulfilled the requirement to be located in the public space was the commemorative place "Passages" designed by the artist Dani Karavan, in honour of Walter Benjamin to commemorate the 50th anniversary of his death. Located in Portbou (Spain) its construction lasted four years and was inaugurated on May 15th, 1994. Its most conspicuous element is a structure that goes through a cliff in the form of a tunnel with a stairway that seems to lead to the sea, a descending structure in which the wind creates a natural whirlwind sound. The tunnel ends with a big glass that frame a place where the water strongly hits the stones, the sound of the sea, the wind and the sound of the steps that the visitor produces when walking on the metallic structure enhance the drama, the vertiginous journey that Benjamin made in his last years of his life, sonorous elements that help the viewer to reflect on that.

While the answers arrived I was going through the (UNESCO World Heritage) List, which I thought was the right place to start looking for acoustic monu-memorials. The list currently has 1073 items listed, divided in cultural sites, natural sites and mixed sites and although the two examples I will describe below are before 1971, I quote them here

because they reveal details that contribute to the present investigation and because they can serve as references for a possible future investigation of cases prior to 1971¹¹.

The first example located in Egypt is under the item *Ancient Thebes with its Necropoli*, two massive and quite damaged quartzite sandstone statues of the Pharaoh Amenhotep III- built in the 14th century BCE.

The northernmost of the two statues is known as ‘Vocal Memnon’. It is 14.76 metres high plus a four-metre pedestal; “for about two centuries, at dawn, when the sunrays touched the statue, a plaintive sound came out of the stone. The 108 epigraphs carved on the legs of the colossus ... are the reliable witnesses of the phenomenon” (Pettorino 1321). Visitors on the 1st and 2nd century believed that the vocal statue was Memnon’s voice greeting to his mother Eos Aurora - Goddess of the Dawn in Greek mythology.

In its original construction when the statues represented the Pharaoh Amenhotep III the sound was not part of the design, it appears after a rupture caused by a “deliberate mutilation by Persians” (qtd. in Sintubin et al. 201) or by an earthquake in 27 BCE.

Because of its sound the “talking statue” became a tourist attraction in its time until a restoration (apparently ca 196 CE) left the statue silent again.

¹¹ This study will concentrate in the memorials and monuments produced under the digital recording era of captured sound, that is from 1971 (the first commercial use of Pulse-code modulation –PCM– digital technology to the present.

This is an example of an homage statue made by one culture (Egyptian), appropriated by others (Greek and Romans) and turned into a tourist attraction.

A second example found in the list is the *Hiroshima Peace Memorial (Genbaku Dome)* located in Japan, “a silent structure ... of the surviving remains of the Hiroshima Prefectural Industrial Promotional Hall ... symbolizes the tremendous destructive power ... and also reminds us of the hope for world permanent peace (Centre UNESCO World Heritage, ‘Hiroshima Peace Memorial (Genbaku Dome)’)”

This second case is significant because this area and its surroundings remain as a quiet place, a re-landscaped field that despite being located in a city space that use to be noisy due to its commercial and residential use, nowadays witnessing also a minute of silence that each year took place at the peace ceremony that has been held in the area every August 6th at 8.15 am since 1947.

The first revision of the UNESCO World Heritage List showed me that I could not find examples of monuments or memorials in public spaces with unrestricted access to the public that have been using sound after 1971. Digging on that issue I also revised the *Modern Heritage properties on the World Heritage List*¹² with many historical city centres, the (UNESCO Memory of the World) list where a standardized framework of the basis for the protection of the world's documentary heritage can be found and the *Intangible*

¹² See (Centre UNESCO World Heritage, *Modern Heritage Properties on the World Heritage List* (as at July 2006))

*Cultural List*¹³, this last one with a broader spectrum of oral traditions, performing arts, social practices, and traditional craftsmanship, that “include not only the masterpieces, but also the masters” (Kirshenblatt-Gimblett 53).

3.1.1.2 Asking Art Curators, Artists & Musicians

In contrast, Art curators, Artists & Musicians send me examples that have a broader concept of what classifies as an acoustic monu-memorial in public spaces. Temporary site-specific works, temporary sound installations, audio-visual installations, audio walks, internet sites, performances, musical compositions, and musical scores were included.

I do not want to say that the heritage experts did not mention audio walks or musical compositions, but I would like to emphasize that the artists sent more examples that tended to be ephemeral than those postulated by the experts in heritage where the examples have mostly a permanent and a tangible character.

To exemplify this point, one of the answers send by an artist was the work *Voz Alta* [Loud Voice] an interactive radio-visual installation designed to commemorate the 40th Anniversary of the Tlatelolco student massacre in Mexico City, made by the Mexican/Canadian artist Rafael Lozano-Hemmer between September 25 to October 5, 2008.

¹³ See (UNESCO Intangible Heritage) the intangible list include also: languages, music, dance, theatre, vocal instruments, performances, rituals, skills, representations, spirituality among others.

A megaphone was placed in the public space on the Plaza of the Three Cultures, the same place where on Oct 2nd, 1968 a peaceful rally was held and after a luminous signal a shooting was triggered by the military and secret police leaving many dead and injured as a result. The number of dead and wounded is still unknown, but hundreds of students were arrested.

The megaphone was modified and connected to four strong Xenon lights¹⁴ so it could not only amplify the voice of the participants but also turn on and off the light according to the rhythm of the voice. One of the lights was located behind the megaphone, so when people talked, the light was behind them, the light did not project its light on the back of the public, but the light beam hit the top of a building nearby –the old Ministry of Foreign Affairs today the Tlatelolco Cultural Centre–. On the top of this building the other three lights were placed “one light pointed towards the Zócalo Square, the second one towards the Monument to the Revolution and the last one towards to the Basilica of Guadalupe” (min 6.25 (*Rafael Lozano-Hemmer - Project ‘Voz Alta’*). These lights retransmitted the light that was in the ground, projecting its rays in the horizontal plane of the city, giving the sensation of a continuous beam of light that was unfolded in the sky above Mexico City.

¹⁴ 4x10kW Xenon robotic lights, a type of strong light with an emission of 5800K colour temperature therefore used to simulate sunlight when is mounted within an elliptical reflector, used mostly as a searchlight, in theatres and in movie projectors. For this installation the lights were visible over a 15 Km radius.

At the same time, the university radio station of the National Autonomous University of Mexico -*Radio UNAM*- broadcasted live on the 96.1 FM the audio captured by the megaphone, the voice of the installation's participants.

Any citizen who passed through the square was invited to participate by expressing freely what they lived or what they felt, and by participating in this action commemorate, mourn, denounce and remember.

The testimonies of the survivors, ex-soldiers and journalists as well as the thoughts of the assistants, were broadcasted live through the loudspeakers; participation was uncensored and unmoderated.

Once the participant left the public-spectators area and used the megaphone, she or he stopped being a passive viewer and became a performer, a part of the work. The spontaneous applause of the public after each intervention was also part of the sound of the audio commemorative installation. "This piece explores the idea that we can speak and we can be heard, not from a position of authority but on the ground, from the street (*Rafael Lozano-Hemmer - Project 'Voz Alta' min 11:51*)".

When no one was using the megaphone the radio station played back archival recordings of 1968 creating a mix of memories. Past and present joined and lived again, people anywhere in Mexico City, as well in Toluca and Cuernavaca (two nearby towns) could tune the audio commemoration that was taking place.

This installation of interactive radio only lasted 11 days, the use of the radio allowed the installation to navigate through the public space and also to enter in the Mexicans' private

space. It made the invisible visible, the implicit explicit and the mute sonorous. It used sound as the creator of a political, social and architectural acoustic sphere.

3.1.2 Media and components

What are the media and components that acoustic monu-memorials located in public spaces generally use? After coding the received answers, the examples showed loudspeakers as the most frequently used device for the reproduction of audio in permanent monu-memorials located in public spaces. The sonic output of the works differs a lot, when loudspeakers are not used, nature played the sounds – wind, sea and trees are the most usual producers of sound in these cases.

One bell or numerous bells have also been used in permanent monu-memorials, besides of the ones used in tower institutions or city halls, which are usually used in national celebrations or special commemorative occasions.

Live microphones, radio and online sites are strategies frequently used by temporal acoustic monu-memorials. Often monu-memorials use a combination of media and not only just one component. Finally, the two most unusual strategies correspond to the use of bone conduction (in the case of Markus Kison's *Touched Echo*, where spectators cover their ears and rest their elbows on a surface allows sound to reach their ears through of their bones) and the electromagnetic induction of sound (in the case Christina Kubisch's *Electrical Walks*, in which sensitive wireless headphones amplify and make audible the electromagnetic fields of urban environments).

The other components found are listed here, (Figure 3-4 Media and components for a complete overview of the strategies used by monu-memorials.

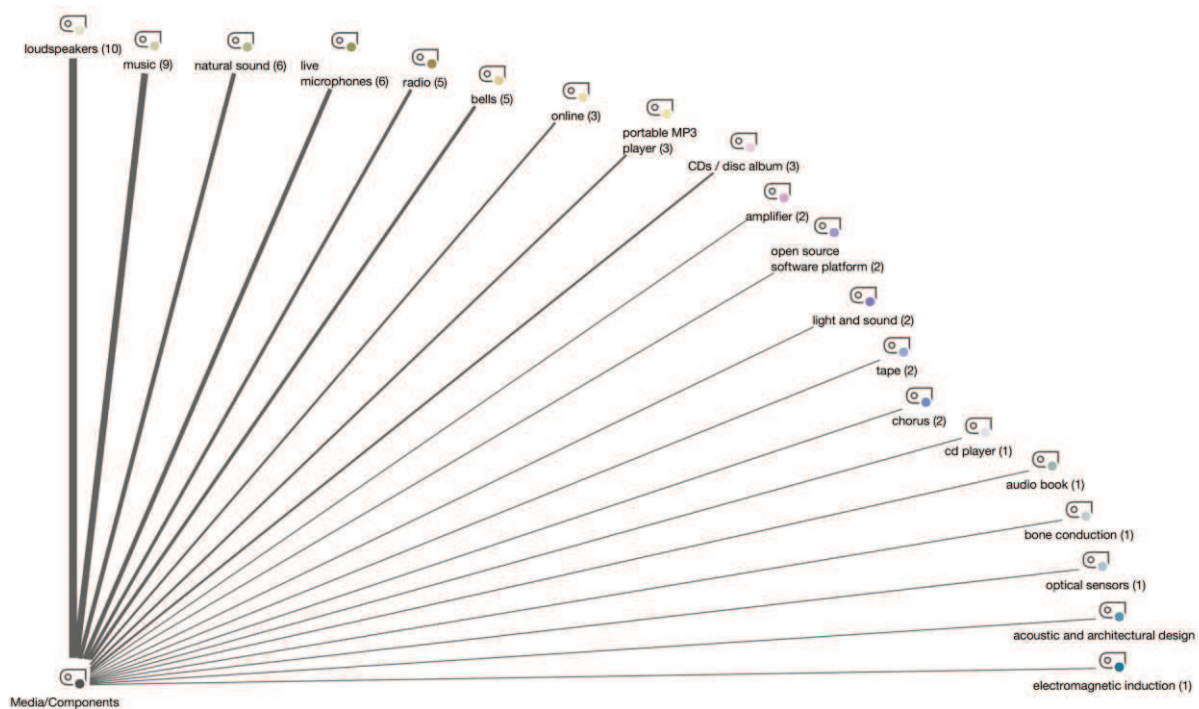


Figure 3-4 Media and components found

Found media & components in the answers received. (Source: created by the author. 2018. Digital Image).

3.1.3 Intentions

What are the intentions behind acoustic monu-memorials?

After coding the responses, the categories found showed that “memory” —defined as the process to bring or recover information back to mind— is the main purpose in the creation, design, and installation of monu-memorials in public spaces. In the second place, it was found that monu-memorials can have a pedagogical function. They can communicate with the viewer something about the past.

The graphic (Figure 3-5) shown below depicts a whole range of possibilities. It can be noticed that artistic explorations occupied the first place. A code that regroups temporal sound installations and compositions that arrived within the answers. Although both used sound as a material in their productions, they did not approach directly the intention to commemorate, or remember or honor someone or something. They were more suited to be categorized as works of art and/or sounding art rather than as monu-memorials.

Vincent Meelberg defines Sounding Art as: “human-made artistic and/or aesthetic applications of sound, be it in music, Muzak, sound art, games, jingles and commercials, multimedia events, and sound design. They are human expressions that use sound as material, medium and/or subject matter (Cobussen et al. 2)”.

One of these cases in which classification was complex, due to its *all-in-one work* essence and the variety of its approaches, is the work *Landschaftsoper Ulrichsberg* [Landscape Opera Ulrichsberg] 2009 by Peter (Ablinger), a work that was splittd in seven parts that combine compositions, audio walks, sound archives, video, performances and workshops.

A detailed list of the intentions that monu-memorials have in the responses received, can be found in Appendix B.

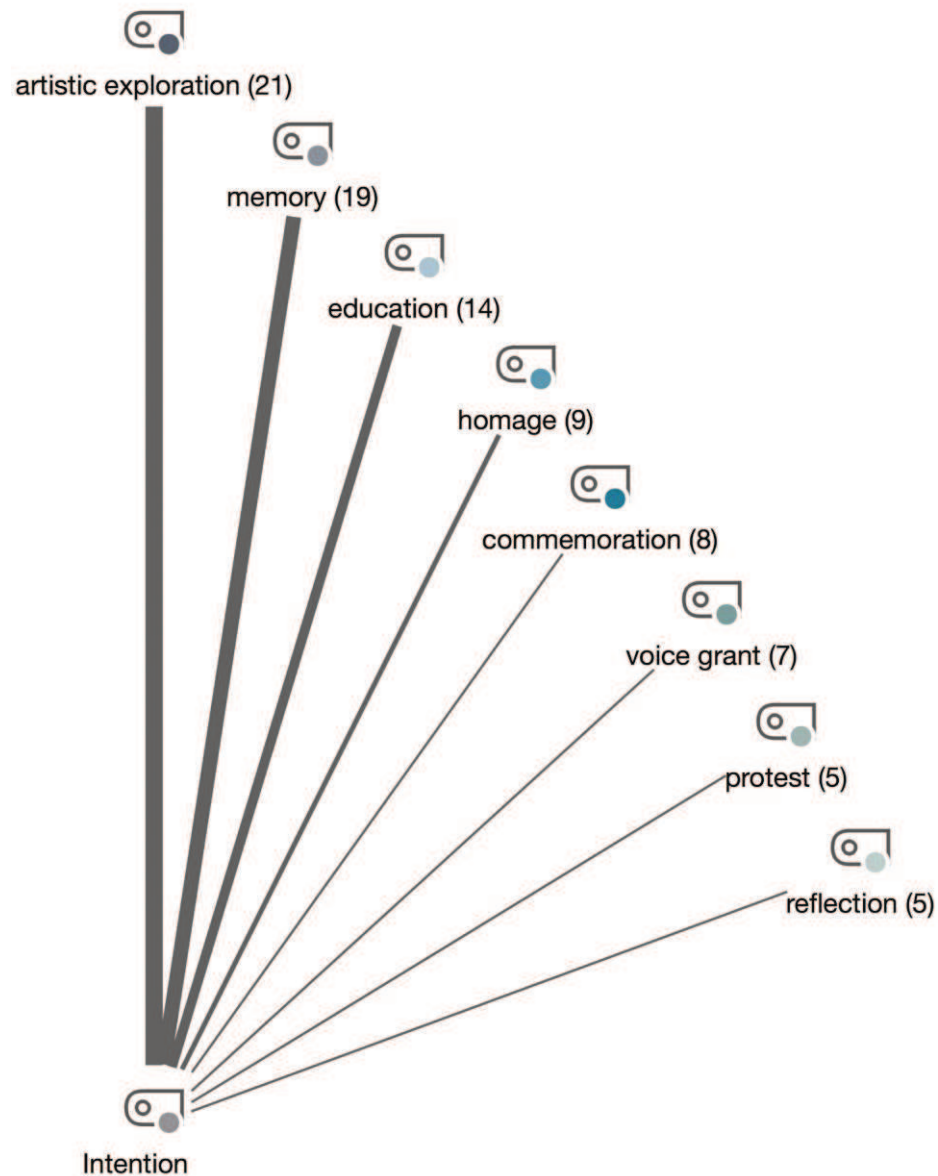


Figure 3-5 Intentions found for acoustical monu-memorials

Intentions found for acoustical monu-memorials in the answers received. (Source: created by the author. 2018. Digital Image).

3.1.3.1 Other intentions

There is only one specific answer related to sound souvenirs, commercial objects that trigger mainly emotional feelings of nostalgia, memory and belonging. Although this example is not directly placed in the public space it is important to underline that it

is closely related to *soundmarks* in a specific city, and therefore triggering memories in a collective way.

The example sent was Las TV's =Barcelona=, small handmade wooden televisions that could be customized with the desired image and sounds of Barcelona city. (Figure 3-6).

These souvenirs were created by a sound designer (Silvia Miranda) and a photographer (Nayeli Salas). These are objects to share, that can travel and be embedded with a personal memory.

Most of the time the images are directly linked to their corresponding sound, the sea, the street or the musicians among other sounds.

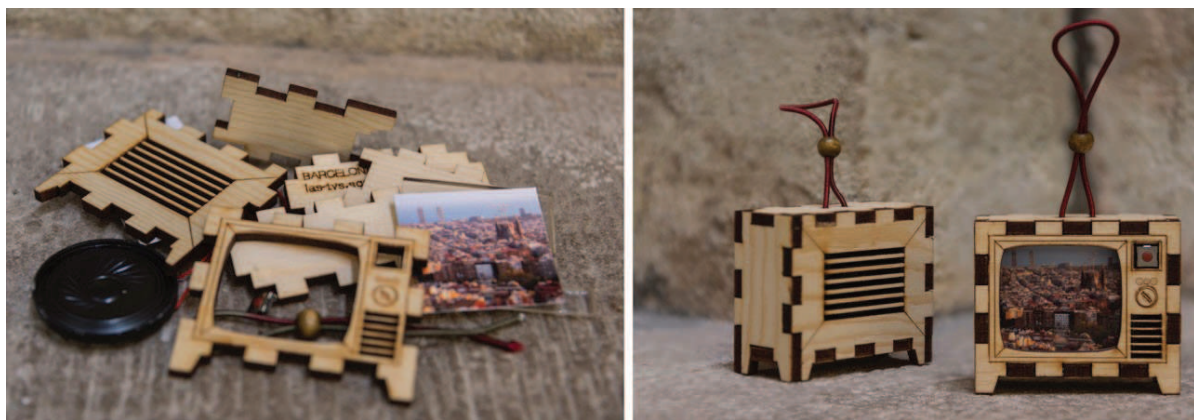


Figure 3-6 Las TV's =Barcelona=

Souvenir conceived by the sound designer Silvia Miranda and the photographer Nayeli Salas. 2015
Left: details of the interior of the souvenir. (©Photo: Milici) *LasTVs 1.4* 2014. JPEG file. Right: souvenir.
(©Photo: Milici) *LasTVs 1.1*. 2014. JPEG file.

Nowadays there are some sound souvenirs in the market. One example is the small reproduction model of the Elizabeth tower. This souvenir comes not only amid its

acoustic components like the ticking of the clock but also the Big Ben's chime could be heard.

Another example was developed with the aim of communicating one day with extraterrestrial life in the far future. Nowadays, the disk known as *The Golden Record* could be considered as an unintentional memorial of Planet Earth. The disk contains a selection of sounds and 115 images of the planet earth and its inhabitants. It is a time capsule that preserves information about who we were almost like a space-time attempt to not be forgotten.

One of the challenges faced by the authors of this compilation (besides the less than 90-minute capacity of the disc) was the question: which sounds should be used to create our audio-earth depiction? Which sounds deserved to be preserved? What happens with the concepts of national or cultural identity when the production had to be thought on global terms?

The committee¹⁵ chaired by Carl Sagan and NASA in 1977 selected the tracks and launched into space in the Voyager 1 and 2 missions.

In the selected audios —designed to be played at 16-2/3 revolutions per minute—was predominant the sound of languages (56 tracks in 55 languages) and music (27 tracks in 90 min) with only 21 tracks dedicated to natural (volcanoes, rain, animals) or technological terrestrial sounds (tools, cars, etc); and an audio essay entitled *The Sound of Earth*.

¹⁵ The team responsible for assembled the Golden Record were Carl Sagan, Frank Drake, Ann Druyan, Timothy Ferris, Jon Lomberg and Linda Salzman Sagan. (Science@NASA and Phillips)

The discs contained also a few audios dedicated to other sounds produced by the human body, specifically heartbeats and brain waves, tracks that contain two layers of meaning: the biological one and the emotional condition of the humankind.

These two tracks were recorded two days after a woman (Ann Druyan) began a love relationship with a man (Carl Sagan), and despite that, it was not possible to hear (in the audio human spectrum) any audible difference in the sounds. Probably a non-human could perceive in the future the brain waves and heart beats of a terrestrial-woman in love. Almost as if the sound of human love could travel into an interstellar space.

The 12-inch gold-plated copper discs are now beyond Neptune and the Kuiper Belt, they will reach soon the space between stars or interstellar space.

3.2 Categories of Acoustic Monu-memorials

Once the examples were found; relations, patterns and tendencies began to appear. From these 110 examples, I selected only those that fit into the category of what this research considers an acoustic monu-memorial. It means firstly: that their main feature is commemorating, remembering or honoring someone or something, secondly: they play sound, and thirdly they are located in the public space. Examples that reproduced audio in a more artistic exploration were left aside, also the examples located in museums or private organizations as well as archives. The detailed list of these non-selected responses can be found in Appendix C at the end of this research text.

The examples I selected, can be classified into 4 different categories from permanent to temporary interventions.

The amount of selected examples produced in the era of digital captured sound are 51. I will describe not only the way in which spectators' approach monu-memorials (active or passive) but also if there was an interface needed or if they could be heard only by the bare ear.

3.2.1 Acoustic Direct Monu-memorials – Passive approach

Direct acoustic monu-memorials with a *passive* approach, are those where audio is constantly being played and *passive* approach is how the viewer approaches it. In this case not any additional effort is needed to perceive the sound more than the naked ear.

In this category nineteen examples classify (Table 1). Ten of these have a permanent character. The remaining nine were temporary, they had been dismantled and exist only in their documentation.

Of this list, six examples will be described in more detail. The strategies used in the sound/audio implementation of the monu-memorial will be explained in a better way. The remaining examples have a brief description. (Links for video documentation and more information can be found in Appendix D).

Table 1 Acoustic Direct Monu-memorials – Passive approach

Permanent	Temporal
Denkmal für die im Nationalsozialismus ermordeten Sinti und Roma Europas	Mayo Los sonidos de la Plaza [1945-2001]
Women of Ravensbrück - Ravensbrück Memorial	Entfernte Züge (Distant Trains)
Escenario en Construcción (Scenario in Construction)	Sound Island
Passages	Nachklang
The Sibelius Monument	Estruendo and Estrépitos
Children's Bell	Maqueta para el Dante
Freiheitsglocke, Rathaus Schöneberg	Time Piece Stommeln
1914-2014 Eine Zeitreise	Sad Songs of War
Organ2/ASLSP [As Slow as Possible]	Radio Espectros
Terrible Garden	

3.2.1.1 Permanent direct acoustic monu-memorials – passive approach

3.2.1.1.1 Denkmal für die im Nationalsozialismus ermordeten Sinti und Roma Europas (Memorial to the Sinti and Roma of Europe murdered during National Socialism)

Permanent site-specific work. Located: Tiergarten (Park) Berlin, Germany. Opened in Oct 2012. Day and night access. Designed by the Israeli artist: Dani Karavan. Audio preußischer Sinto artist Romeo Franz.

This memorial consists of a green area surrounded by trees and glass panels. In the middle of the space it is possible to observe a dark circular plane pond of water with a retractable triangular stone platform in the center, on which a fresh flower is daily on

display. Around the water area is a metal ring-canal where the poem *Auschwitz* by Roma author Santino Spinelli is inscribed in German and English.

The artificial pond is surrounded by broken slabs of stone in a decreasing pattern as they move away from the center, some of these stones have the name of concentration camps carved on them. In the white frosted glass panels, the spectator can read the name of the memorial in three different languages (German, Romani and English) and the chronology of the events in the genocide of the Sinti and Roma (German and English).

In addition, there are 4 loudspeakers in the surrounding area hidden behind the trees playing the sound of the musical composition *Mare Manuschenge* (Our people) made specifically for the memorial by the Sinti musician Romeo Franz. The 4 speakers cover acoustically the physical area of the memorial, so it is possible to listen to the music at any point inside the monument inside, as well as outside as far as 15 to 20 meters, thus enlarging the memorial's area.

The memorial, as its name implies, is dedicated to the memory of the people murdered during the Nazi genocide of the European Sinti and Roma people.

3.2.1.1.2 Women of Ravensbrück - Ravensbrück Memorial

Permanent site-specific work. Located: Museumplein Amsterdam, Netherlands. Completed: 1975. Day and night access. The commission went to Joost van Santen, Guido Eckhard and Frank Nix. Design by the Dutch artist Joost van Santen.

The memorial located on the Museumplein (east side) in the centre of Amsterdam was created to commemorate the Dutch victims who lost their lives in the German concentration camp Ravensbrück.

The memorial is composed of one stainless steel column, which emits light and sound signals and forms the core of the sculpture. Eleven metal reflector plates surround the column in a semicircular and stepped way. The sizes of these panels gradually increase until the last without exceeding the height of the central column. Two of these panels (nine and ten) have inscriptions in Dutch-Language, with the following texts:

Vrouwen van Ravensbrück 1940-1945 / Women of Ravensbrück 1940-1945

voor haar die tot het uiterste neen bleven zeggen tegen het fascisme /

to those who persevered to the utmost in saying no to fascism.

The idea of the concentric panels is to reflect the different intensities of light that change in response to the sound signals, emitted by the central column.

The column emits two different signals, one symbolizes the dead and the other those who survived. The first signal consists of a dawning light, which then slowly fades away, to be followed by a swelling and receding wave of sound, this stands for the women who did not return. The second signal is a revolving flashing light combined with a pulsing sound. This symbolizes the women who survived Ravensbrück (van Santen 6-7).

On days when there is a lot of public around it is difficult to listen. Therefore, it is necessary to get close enough to the central column to listen to it.

3.2.1.1.3 Escenario en Construcción (Scenario in Construction)

Permanent site-specific work. Located: Cl. 19 with K. 3 Bogotá-Colombia. 2016. Day and night access but audio plays every 59 minutes from 7:00 a.m. to 7:00 p.m. Designed by the Colombian artist: Oswaldo Maciá. Audio from British, Dutch and French ornithological audio banks.

This work was an award winner of the First International Competition *Open Space Museum* in Bogotá. It is a call that sought to remember the old water collection paths of the city and the river that crosses below this point. A sound sculpture with five cones and five open cubes situated in the centre of a roundabout. The artist uses the sound of the calls of the 1,900 species of birds that exist in Colombia.

3.2.1.1.4 Passages

Permanent site-specific work. Located: in Portbou Spain. Constructed between 1990 and 1994. Day and night access. Designed by the Israeli artist: Dani Karavan. It is an homage to the German Jewish philosopher Walter Benjamin.

This memorial is located on a coastal cliff, bathed by the Costa Brava, a coastal area that ends at the border with France in Portbou, Spain.

On the top of the cliff, about twenty meters above sea level is located the Municipal Cemetery where a plaque with the name Walter Benjamin can be found. The memorial is not located inside the cemetery but around it, which allows different spaces of memory, mourning and commemoration to coexist.

The memorial requires that the viewers create their own paths, an experiential voluntary process by the different elements that makes up the memorial: an olive tree, a

square platform with a cube in its centre, a five-step staircase, a stone wall, and a rusty steel tunnel with 87 steps descending 13.45m at an angle of 30°.

A concentrated walking is also required from the spectator, to see the not so obvious elements that also make up the memorial: the grass, the sea water, the sky, the sounds of the wind, as well as her/his own sounds, feelings and thoughts: “the change of light, the brightness, the noises, the unease —all are part of this experience (Scheurmann et al. 72)”

“Nature is of central importance in Dani Karavan’ work. He sees it as the origin which all man’s thoughts and deeds can be traced back and as a reservoir in which all forms are already present. ... he illustrates its significance through the artistic use of sand, water, wind, sunlight, and plants, which he describes as his ‘alphabet’.

Since his *Negev Monument* (1963-68) he has creatively incorporated the natural landscape and the elements that shape it into his environments ... (Jacobi et al. 396).”

The descending tunnel with steel walls is interrupted by an opening that is shielded by a big plate of glass that blocks the spectator’s path. The viewer then can contemplate the sea, observe the rest of the stairs and read Benjamin’s words engraved on the glass.

The glass is acting like a window that frames the turbulent sea, “a natural metaphor for Benjamin’s fate ... a swirling sea that sometimes gently played around offshore rocks along ... sometimes lashed out, and sometimes leaped threateningly against the shore, only to sink thunderously back again, engulfing everything (Scheurmann et al. 39).”

Walter Benjamin’s words are written in German in the upper part of the glass and in Catalan, Spanish, French and English in the lower part. Benjamin words are: It is more

arduous to honor the memory of the nameless than that of the famous. Historical construction is devoted to the memory of the Nameless.

During its construction “some people regretted the absence of any representational depictions of Benjamin as an indispensable element in such a memorial (Scheurmann et al. 42)”, the same situation faced by Eila Hiltunen faced about 25 years before while working on the elaboration of *The Sibelius Monument* and where finally a figurative bust had to be added to the original monument design as a request of the collective.

Passages, the name of the memorial was inspired by Benjamin's notes of his unfinished last work *The Arcades Project*, on the concept of the life in the 19th-century Paris, and reflections about the urban experience. *Passages* – is an homage to Walter Benjamin. The memorial was funded by the Government of the Generalitat de Catalunya, the Government of the Federal Republic of Germany as well as private donors.

3.2.1.1.5 The Sibelius Monument

Permanent site-specific work. Located: Sibelius Park the (district of Töölö) Helsinki - Finland. Unveiled in Sep 7, 1967. Day and night access. Designed by the Finnish artist: Eila Hiltunen. This monument is dedicated to the Finnish composer Jean Sibelius.

“The Sibelius Monument consists of approx. 600 acid-proof stainless steel tubes of various diameters (Ahtola-Moorhouse and Pietinen)”. As the wind passes through the different lengths of pipes (aeolian activation), it plays different chords. The entire structure resembles a tree and is mounted on an almost flat rocky outcrop. A few meters

to the side there is a rock of higher height where another more figurative sculpture is located, depicting the face of the composer at the peak of his career. This bust was added later due to the pressure of having an entirely abstract monument to honor the national musician.

The monument's plaque is engraved in three languages (Finnish, Swedish and English) indicating the name of the work —the sculpture is entitled *Passio Musicae*, the date, the purpose —Monument to commemorate the composer Jean Sibelius (1865–1957) and the name of the sculptor.

This monument requires the spectator to take the time to listen to it, (since the monument produces a very quiet sound), and it requires the complicity of the other visitors to agree a collective silence to hear it better.

These difficulties inspired in 2015 a group of artists¹⁶ to create the *Passio Musicae Open Source*, an attempt to reconstruct the Sibelius Monument's sound, an interactive sound installation of the Sibelius Monument to explore the sounds hidden behind the monument. Presented at the National Art Gallery of Finland, the Ateneum Art Museum, using the actual physical dimensions of the original monument. Sounds were generated with the movement of the visitors.

¹⁶ Artists: Lukas Kühne, Matti Niinimäki, Karina Jensen, Ava Grayson, Jairo Acosta Lara, Narim Lee, Sébastien Piquemal, Taavi Varm, Pirkka Åman. To more details and documentation see: (Åman)

This sonorous monument dedicated to the Finnish composer captures the essence of the Sibelius's music and the connection between nature and his compositions entitled titles as *Spring Song*, *Lizard* and *Water Drops*, among others.

3.2.1.1.6 Children's Bell

Permanent site-specific work. Located: in Bodega Bay -California. 1996. Day and night access. Designed by The US sculptor: Bruce Hasson.

This is a memorial to Nicholas Green, a seven-year-old boy killed in a robbery whose parents donated his organs to patients who needed them. To show gratitude for the Green family, three towers were erected, with 140 bells hanging from the steel bars. The central bell carries an inscription with the names of the recipients of the organs. The other bells were donated by local schools, churches and others.

3.2.1.1.7 Freiheitsglocke, Rathaus Schöneberg

Permanent site-specific work. Located: in Rathaus Schöneberg Berlin, Germany. 1950. Restricted access to the physical object but the ringing of the bell occurred every day at noon for two minutes and is aired by *DeutschlandRadio Berlin* every Sunday at 11:58 a.m.

Commissioned to the US industrial designer Walter Dorwin. Made by the British sculptors Mr Artie Brown & Wife. The bell was cast by Clock & Bell Makers Gillett & Johnston (Croydon) Ltd. Tuned in e. Memorial to all the persons who gave their lives to the cause of freedom.

3.2.1.1.8 1914-2014 Eine Zeitreise Time travel through 100 years of German History

Permanent work. Located: in Berlin – Germany. 2014. Day and night access.

A multimedia exhibition in an unrecognizable, twelve-meter-long sea container, divided in the middle, open at the side and equipped with eight large screens. Using original film sequences with its corresponding audio this work summarizes the German history from the First World War to the reunified Germany. In commemoration of the 25th anniversary of the *Friedlichen Revolution* and the fall of the Berlin Wall.

3.2.1.1.9 Organ2/ASLSP [As Slow as Possible]

Permanent site-specific work. Located: San Burchardi-Church Halberstadt, Germany. 2000-2640. Restricted access Tuesday to Sunday °April - Oct (11:00 to 17:00) °Nov - March (12:00 m to 4:00 pm).

Stiftung Halberstadt - The construction of the organ was carried out by Orgelbau Romanus Seifert & Sohn GmbH & Co. with the support of Reinhard Hufken. Musical piece by John Cage.

A double homage, to the city of Halberstadt where the first large *Blockwerk Organ* was built with a 12-tone keyboard in 1361, and to the American composer John Cage. Also, to reflect on our accelerated time.

3.2.1.1.10 Terrible Garden

Permanent site-specific work. Non constructed but proposed (1994) for the city of Wiesbaden-Germany by the US artist Jenny Holzer.

Holzer's proposal was a garden of dark roses, with a cylindrical hollow body sunk in the Earth. From the ground the visitor would hear sounds, music and the voices of

Nazis and those facing their prosecution. It is planned to be a Central memorial for the victims of the National Socialist dictatorship.

3.2.1.2 Temporal direct acoustic monu-memorials – passive approach

3.2.1.2.1 Mayo Los sonidos de la Plaza [1945-2001]

Temporary site-specific audio intervention. Exhibited in: Plaza de Mayo. Buenos Aires, Argentina. (2003 and 2006). Idea and general direction by the Argentinian musician researcher Martín Liut.

Sonorous archive: Leandro Donoso. Historical Documents from: Archivo General de La Nación; Eter (Escuela Terciaria de Estudios Radiofónicos), Metropolis Media Group, and the UTPBA's library. (Unión de Trabajadores de Prensa de Buenos Aires). It was a sound immersion in chronological order of the Argentine history between 1945 and 2001. The sound material was broadcasted by speakers - five times throughout the day of the intervention - in eight columns of sound arranged in a circular shape around the May Pyramid; A ninth column was located outside the circle by a few meters, it was oriented in the direction of the Casa Rosada (the executive mansion and office of the President of Argentina). The sound console and computers were positioned at the edge of the circle on a one meter fifty high platform.

The work of 64 minutes was a mixture of documentary, radio pieces and electroacoustic compositions. There were no photos, or videos nor explanatory graphics, only the invitation to stay in the square and listen.

3.2.1.2.2 Entfernte Züge (Distant Trains)

Temporary site-specific audio intervention, Exhibited in: Anhalter Bahnhof Berlin, with sounds of the Köln Hauptbahnhof (train main station of Cologne), Germany. 1984. A work by the US artist: Bill Fontana.

Buried speakers played sounds at the former Europe's busiest train station, the Anhalter Bahnhof. Nowadays is it an empty field due to the severe damage it suffered in World War II. Only some wall ruins remain.

3.2.1.2.3 Sound Island

Temporary site-specific audio intervention, Exhibited at the Arc de Triomphe, Paris-France. With sounds of the English Channel. 1994. A work by the US artist: Bill Fontana.

Commemoration of the 50th anniversary of the D-Day landing at Normandy and the liberation of Paris. Hidden loudspeakers on the facade of the Arc de Triomphe transmitted live, via underwater hydrophones and microphones the natural noise of a rugged sea cliff on France's Normandy.

3.2.1.2.4 Nachklang

Temporary site-specific audio intervention, Sound landscape exhibited in Weimar, Germany. (May 1 to June 30 and extended by two months) in the exhibition project *Licht auf Weimar*. 1999. A work by the Canadian artist: Robin Minard.

The intention was to reflect on the presence in Weimar of the Buchenwald concentration camp. This was one of the first and largest concentration camps on German soil.

In 1937 the Nazis established a concentration camp on Ettersberg hill, a place that was known because for its beech trees, in German Buchen, hence its name Buchenwald – beech forest. The camp operated until 1945.

From the city of Weimar looking to the northwest, the usual elements that compose a concentration camp: the watchtowers, the prison block or the electrified barbed wire perimeter fence, were relatively not so visible.

In 1958 the *Nationale Mahn- und Gedenkstätte Buchenwald* (Warning-Monument and Commemorative-Place Buchenwald) was constructed. The complex included a conspicuous symbol, the *Freedom Tower*, a bell tower that dominated until today the visible field of view from Weimar. The area of the camp nowadays has a permanent exhibition and serve as a memorial.

The *Buchenwald-bell* inside of the *Freedom Tower* was cast in 1956 by Franz Schilling¹⁷, in f °, and the design is from the Berliner sculptor Waldemar Grzimek. He included in the design barbed wire in relief on the surface. Until today its sound is heard every hour three times even during the night, as well as in April 11 in commemoration of the liberation of the prisoners in the concentration camp by the soldiers in the Sixth Armored Division of the United States Third Army.

Minard's work was based on recordings made of the sounds of the *Buchenwald-bell*. The bell was specially played for the piece not only its stroke, as well as with sticks and mallets. After these sounds were recorded, the artist processed them electro-

¹⁷ From the bell foundry family Schilling in Apolda-Thüringen. a company dedicated since 1826 to the manufacture of bells.

acoustically with the intention of audio-spatialize the compositions over the city of Weimar. He played these compositions through a high-performance loudspeakers system located in important bell towers in the centre of Weimar —the Herder’s Church tower, the Castle tower and the tower of Weimar’s City Hall—. At 8:15 am and 6:15 pm the compositions were played as well as at 3:15 pm, the time when the liberation of the concentration camp took place. It was a specific sound for each time of the day.

“In a film made by American army cameramen, we can still see today how the citizens of Weimar, led after the war to Buchenwald concentration camp on the slopes of Ettersberg, gestures to indicate that they had known nothing (Schulz 15)” about the horror of the camp. With this composition invading the acoustic space of the city and the spatial experience, Minard sought to trigger in Weimar’s citizens a reflexion on the facts and attitudes to this particular event in the history of the city.

3.2.1.2.5 Estruendo and Estrépitos

Temporary site-specific audio interventions. Exhibited in: Bogotá, Colombia. 2012.
Designed by the Colombian artist: Mauricio Bejarano.

An audio reconstruction of ‘the Times of Noise’, a collective sound memory of a roar that woke up the citizens of Santa Fe de Bogotá on Sunday, March 9, 1687, at 10:00 pm. The deafening noise lasted 15 minutes and it could not be recorded. Estrépitos recreated this event in a piece of 4 minutes 33 seconds, that was heard at 11:00 am and at 4:00 pm during its exhibition.

Estruendo was based on a fictional character: Francisco Chirino y Calvo, a man who allegedly recorded that noisy night. A fiction because the recorder device had not been

invented yet in 1687. Four fragments of a minute and a half each, were played every 15 minutes during the day of the exhibition.

It was presented in different locations, taking into account that the compositions reached public spaces outdoor.

3.2.1.2.6 Maqueta para el Dante

Temporary site-specific work. Exhibited in Bogotá –Intervention in *Los Heroes Monument* Bogotá, Colombia. 2012. Designed by the Colombian artist: José Alejandro Restrepo

His worked recreated a descending journey using the interior and exterior of the *Monument to the Heroes* in Bogotá. The objective of the work was to reverse the natural tour of the monument. Visitors were ‘forced’ to climb to its highest point through scaffolding to gain access to the building at the top and to descended finally leaving it through the entrance door. The intervention sought to encourage citizens to rediscover the monument. This is a monument related to the fascist ideology, designed in 1952 by the futurist and fascist architect Angiolo Manzoni. The pieces presented inside the monument had an audiovisual character: video projections and sound installations.

3.2.1.2.7 Time Piece Stommeln

Temporary *Sound Installation* (term coined by the author in 1969). Exhibited in Stommeln, Germany. 2007. Designed by the US artist: Max Neuhaus.

This installation wanted to at the same time honor the memory of the Jews murdered in the Holocaust and give a voice to the synagogue members.

The Stommeln Synagogue is located in the town square of Stommeln. This was the place chosen by Neuhaus to display a sound signal that filled all the acoustic space of the plaza. For an unaware spectator it seemed that nothing was out of the ordinary, until the sound signal suddenly stopped, and a void is suddenly perceived. The spectator or passer-by realized that something else was happening in the plaza: the perception of an unexpected silence.

The sound signal was composed inside the synagogue nearby where the artist spent time listening to the sound of the space. The resulting composed sound signal was not stronger than the ambient sound in which it is embedded, on the contrary, the sound signal was barely perceptible. The signal was played at Halachic Hours, between sunrise and sunset that divided the time into twelve equal sections, which meant the signal was played at different times every day. It showed respect towards the Jews (OZ_NRW).

Max Neuhaus was the guest artist for the 2007 version of the art project Synagogue Stommeln, a project that annually invites artists to realise a project related to the space, underlining its historical context and its architecture. "The synagogue in Stommeln, today a part of the City of Pulheim, is one of the few synagogues in Germany that were neither destroyed during the pogroms of 1938 nor razed during the post-war surge in urban renewal ('Synagoge-Stommeln Das Kunstprojekt')".

3.2.1.2.8 Sad Songs of War

Temporary performance presentation. Exhibited in the Public program of MANIFESTA, St. Petersburg Russia 10. 2014. Conceived by the Lithuanian artist: Deimantas Narkevicius.

Musical performance of Cossack choirs. It addressed the traditions of the Cossacks culture in Ukrainian and in Russian.

3.2.1.2.9 Radio Espectros

Temporary performance presentation. Presented at the exhibition *Al Claro de Luna: Reminiscencias Sonoras*, Bogotá 2013. Conceived by the Colombian artist: Leonel Vásquez.

This were audio recording of archive material from the official, private and clandestine radio's broadcasted on April 9, 1948 —date on which the popular president candidate Jorge Eliecer Gaitán was assassinated— and the subsequent days: 10 and 11, in Bogotá.

The temporary radio station was mobilized in an adapted bike in the streets of Bogotá. Transmitting on the frequency of *Señal Radio Colombia* 95.9 fm.

3.2.2 Acoustic Direct Monu-memorials – Active approach

Direct acoustic monu-memorials with an *active* approach, are those which play audio constantly during their duration. An *active* approach means that, despite the fact that audio is being played, it needs the viewer's interaction for its completion. These are known as *Performative Monu-memorials*.

Under this category four examples classify (Table 2); two of them have a permanent character. The remaining 2 were temporal, they have already been dismantled and only exist in their documentation. (Links for video documentation and more information can be found in Appendix D).

Table 2 Acoustic Direct Monu-memorials – Active approach	
Permanent	Temporal
<i>Niche</i> Monument to Jairo Valera	Voz Alta (Loud Voice)
Hearing View Rheinau	Ugnayan

A short description of each one is listed below. Two examples will be described in more detail in order to understand better the strategies used in the sound/audio implementation of the monu-memorial.

3.2.2.1 Permanent direct acoustic monu-memorials – active approach

3.2.2.1.1 Niche Monument

Permanent site-specific work. Located: Plazoleta Jairo Varela Cali, Colombia. 2015. Day and night access. Designed by the Colombian Architect: Fredy Pantoja and the Colombian Artist: Lucía Alba.

Niche is an homage to Jairo Valera, a Colombian musician who died in 2012. Co-founder of the *Grupo Niche*, one of the most well-known salsa groups in Colombia. The monument has the shape of the letters that conform the word *Niche* and its design resembles a big trombone with four bells. It is made in galvanized steel and painted with gold synthetic enamel.

The song *Cali Pachangero* one of the most famous songs of the group can be heard in the monument in its three different sections — rhythm, harmony, and melody— as well as the complete song. The main intention of it, is to create a space where the composition skills of Varela's can be displayed. The monument is almost like a scenario where viewers can interact inside each bell, dancing, talking, and singing are allowed and also desirable in the monument. The audio is played by a speaker inside of each bell. Some lyrics excerpts from Varela's compositions can also be read in the inner side of the bells.

The monument is located on the Plaza Jairo Varela where the Jairo Varela's Museum is also located, complementing the complex that pays homage to this talented composer.

3.2.2.1.2 Hearing View Rheinau

Permanent site-specific audio intervention. Psychiatrische Universitätsklinik Zürich, Psychiatric University Clinic Zurich, Rheinau Building 80/82, Zurich. 2013. Designed by the Artists: O+A Bruce Odland (US) + Sam Auinger (Austrian)

Commissioned by the Psychiatric University of Zurich. A *sound cube* is located in the garden as a way to reflect about the transformation of the environment. The viewers can sit on the cube and depending on the time of the day and the season, it activates the playback of different atmospheres through a library of sounds from Rheinau.

3.2.2.2 Temporal direct acoustic monu-memorials – active approach

3.2.2.2.1 Voz Alta (Loud Voice)

Temporary site-specific sound installation Located: *Plaza de las Tres Culturas* Mexico DF. Mexico. 2008. Designed by the Mexican/Canadian artist: Rafael Lozano-Hemmer.

This was an interactive radio-visual installation designed to commemorate the 40th Anniversary of the Tlatelolco student massacre in Mexico City. (Please see section 3.1.1.2 of this document for more information).

3.2.2.2.2 Ugnayan

Site-specific work – Performed in 1974. Author: Filipino composer José Montserrat Maceda. Twenty music tracks played back by radio stations. 51 min. Commissioned by the Cultural Centre of the Philippines.

The Ugnayan work made by Maceda was originally recorded on a full track magnetic tape. Located at the frontier of the magnetic and digital era of recording sound, the composition was digitalized later.

In Ungayan, musicians performed a score written by Maceda with twenty parts using traditional instruments¹⁸. The score was recorded in the studio of Radio Veritas (the Catholic church radio station) that result in twenty different tracks.

¹⁸“*Kolitung* (polychordal bamboo zithers), *bunbung* (bamboo tube horns), *ongiyong* (bamboo whistle flutes) *bangibang* (yoke-shaped wooden bars), *balingbing* (bamboo buzzers), *agung* (suspended bossed gongs), Chinese cymbals, gongs and echo gongs (Nicolas 5)“.

Parallel to the recording process the community was invited through letters and flyers to participate. The guests were invited to arrive the 1st of January 1974 at 6 pm and brought their own radios. Not musical knowledge was needed.

Newspapers began an expectation campaign pointing out traditional Philippine instruments unknown by many at that time, like the Bontoc violin or the Kulintang, this created curiosity and prepared the public to what they would listen, although the public did not know at that moment that the instruments would not be played live but only through the radio.

On the day of the performance, the twenty tracks previously recorded were broadcasted simultaneously through 33 Manila's radio stations (one track per station). People were requested to tune radio stations with their own hand-held transistor radios. The response of the community was massive, not only in downtown Manila but also in other cities nearby. People gathered together and tuned different radio stations at the same time, creating a new and unique composition in the public space, a “communal urban symphony”.

Maceda had access to the media with the support of the former first lady of that time Imelda Romualdez Marcos, who also named the work. *Ugnayan* which means: people united together or network. She supported Maceda's work firstly because of her love for music and secondly because she wanted to create public awareness about the original and pure Philippine sounds, as part of her political and nationalistic agenda. The first lady was presented as the organizer, coordinator and head of the cultural production of the piece at that time (Guerrero).

Ungayan was not presented to the public as an acoustic memorial or as a revolutionary piece. It was more like a ritual to restore a fair order as was suggested by (Nicolas 10)¹⁹. Maceda included human voices pronouncing words in the *Part Two* of the composition (min 37:30), words referring to emotions, sadness, pain, grieve. The set resembled a prayer.

The fact that the piece integrated a large number of people, giving them a voice in a period of deprivation of rights could be read as an act of reflection in the 822 days after Ferdinand Edralin Marcos declared Martial Law on September 23, 1972, where curfews, checkpoints and prohibitions for public assemblies were established.

This musical composition allowed citizens to meet, to create a community and intertwined through music. This created a massive sound environment; sounds emanating from many sources at the same time that highlighted the identity and voice that the population still had, even in a dictatorial regime. It was a collective acoustic experience in public spaces.

¹⁹ Arsenio Nicolas explain: Part two - min 37:30 - Voices singing descending two-tone phrases with the words *nangis and *rasa --- *nangis3 (Austronesian: to cry, weep or mourn, as if in anguish and pain; Malay: nangis Tagalog: tangis); *rasa (Sanskrit: feeling, emotion, taste, essence, substance, intention; Javanese and Malay: rasa; Tagalog: lasa), and texts from a Kalinga epic from northern Luzon, Ullalim, uttered and whispered like prayers.

These two words and the text of an epic pictured a world that first was in anguish and pain, and in tears (nangis), after which the recitation of passages from the Ullalim simulates the chanting of rituals and prayers towards the restoration of order, of substance, of essence (rasa).

3.2.3 Acoustic Indirect Monu-memorials

Indirect acoustic monu-memorials with a *passive* approach, are those that do not play any audio, but despite of this fact have a strong relation with sound.

In this category fall all the busts, sculptures, statues representing musicians, composers, interpreters, commemoratives plaques, burial gravestones as well as sound-related objects: musical instruments, wave sound representations, and all its derivatives could be included. This research only focuses on the ones that reproduce sound. Just a few examples are necessary to give an idea of what means acoustic indirect monu-memorials are listed.

Seven examples classify in this category (Table 3), six of these have a permanent character. Two examples will be described in more detail. (Links for video documentation and more information can be found in Appendix D).

Table 3 Acoustic Indirect Monu-memorials		
Permanent		Temporal
Double Memorial - Michael Jackson & Orlande de Lassus or Roland de Lattre		Schlaflos [Sleepless]
Monument 's silence to remember. Edward George Honey Liberty Bell, Independence Hall Philadelphia		
Der Rufer		
The Table of Silence		
Jewish Mahnmal in Buchenwald		

3.2.3.1 Permanent indirect acoustic monu-memorials

3.2.3.1.1 Double Memorial - Michael Jackson / Orlande de Lassus/Roland de Lattre

Permanent site-specific work. Located: Promenadeplatz Munich, Germany. 2009
Michael Jackson / (1860) 1958 Lassus. Day and night access. The Lassus sculpture made by the German artist: Maximilian Ritter von Widmann. The Jackson commemoration site is maintained by the fans.

The German sculptor Maximilian Ritter von Widmann (1812-1895) professor and sculptor of the Art Academy of Munich made numerous commissioned statues and busts. One of these was the figure of the Belgium composer Orlande de Lassus also known as Orlandus Lassus or Roland de Lattre, although his real name was probably Delattre (1532-1594). Commissioned by the King Ludwig I of Bavaria, the work was unveiled in 1849, showing a full body figure with his left arm resting on a portative organ or organetto. The figure that currently exists was recast in 1958, since the original was destroyed in the bombardments suffered by the city in the Second World War.

The Promenadeplatz houses ordered four more commemorative sculptures²⁰. In one of its sides is located the Bayerischer Hof hotel, a building that unintentionally alters the shape of the pedestal of de Lassus sculpture. The reason for this incident was that Michael Jackson used to stay in this hotel when he visited the city of Munich and when he died his fans decided to appropriate the pedestal of the Lassus' Denkmal, probably

²⁰ The five commemorative sculptures are: For the German theologian, educator, historian Lawrence Westenrieder. For the musician Orlando di Lasso. For the Austrian composer Christoph Willibald Gluck. To the elector Elector Maximilian II Emanuel of Bavaria and for the German politician and statesman Maximilian Joseph Count of Montgelas.

because of three aspects: The first one its localization, the second one the detail of the portable organ that gives a clue that the figure represents a musician and the third that de Lassus was considered one of the most influential musicians in Europe of his time.

Jackson's fans keep constantly changing the pedestal which is nowadays adorned with photos, flowers, candles and other creative objects and offerings. The images are laminated to avoid deterioration by the weather conditions.

The appropriation of the pedestal shaped it in an *Umwidmungsdenkmal*/rededication-memorial or a double-memorial depending on the eyes of the observer. It is a palimpsest, an overwriting and an update. Its characteristics remind the story of the *Vocal Memnon*²¹, the example of an homage statue made by one culture (Egyptian) and appropriated by others (Greek and Romans) and turning it into a tourist attraction.

The city has tried to clean up the pedestal several times, but the repetitive action of the fans has forced the city to finally tolerate the commemorative place.

3.2.3.1.2 Monument's silence to remember. Edward George Honey

Permanent site-specific work Located: Birdwood Avenue Melbourne, Australia. 1965.
Day and night access. Author unknown.

It is attributed to Mr. Honey, who proposed to dedicate five minutes of silence in mourning to those soldiers who died in combat.

²¹ See section 3.1.2.1. on this text for more information about the Vocal Memnon.

3.2.3.1.3 Liberty Bell, Independence Hall Philadelphia

Permanent site-specific work. Located: at 6th and Market Streets Pennsylvania USA. 1752. Restricted access. Commissioned by the Pennsylvania Provincial Assembly.

Previously called the *State House Bell* or *Independence Bell*, it was adopted by the abolitionists of the slavery movement in the United States around 1837 as a symbol and was renamed as Liberty Bell.

3.2.3.1.4 Der Rufer

Permanent work. Located: Straße des 17. Juni Berlin, Germany. 1989. Day and night access. Another cast by the original figure made by the German sculptor: Gerhard Marcks (1889 -1981).

The motive is inspired by the character *Stentor* of the Iliad. Whose voice was as strong as the one of 50 men. The piece stands on the Strasse des 17. Juni (in the past West Berlin) It 'screams' for peace.

3.2.3.1.5 The Table of Silence

Permanent site-specific work. Located: Târgu Jiu, Romania. 1938. Day and night access Commissioned by the *National League of Gorj Women*. Made by the Romanian sculptor: Constantin Brâncuși.

Part of The Sculptural Ensemble is an homage to the Romanian heroes of the First World War.

3.2.3.1.6 Jewish Mahnmal in Buchenwald

Permanent site-specific work. Located: Block 22 inside of the Commemorative-Place Buchenwald, Weimar, Germany. 1993. Restricted access. Made by the German artist: Tine Steen & the German architect: Klaus Schlosser.

It is a warning-memorial to all the Jews who perished in the Buchenwald Concentration Camp. It was conceived to have pieces of olive wood placed into a poured concrete wall in “an arrangement that follow the rhythm, sequence and harmony of Arnold Schönberg’s composition: Accompaniment music to a Film-Scene (Begleitungsmusik zu einer Lichtspielszene), Op. 34.”²² A graphical and silence visualization of Schönberg’s music with its three parts: *Threatening Danger*, *Fear*, and *Catastrophe*.

Nowadays the Jewish Warning-memorial has the wall with the olive wood pieces inside but due to technical problems with the concrete casting and the unfavourable weather conditions, the wood pieces do not follow the desirable pattern of Schönberg score.

3.2.3.2 Temporal indirect acoustic monu-memorials

3.2.3.2.1 Schlaflos (sleepless)

Temporary site-specific work Located: Oberlandern, Germany. 2001- (dismantled 2009). Designed by Willi Beuhaus as a community project and created as a warning memorial by the German sculptor Veronika Hagn-Roth.

Radio Free Europe was created in 1949 with the goal to provide uncensored news to countries that receive constant communist propaganda. The inhabitants of Czechoslovakia, Romania, Poland, Hungary, Bulgaria and Albania could hear independent news of the politic and military situation, as well as music, plays and all that

²² Information provided by *Buchenwald Archive* of unrealized publications – 15. 05. 2018.

was forbidden in their own countries, with the advantage that the programs were broadcasted in local languages. In Germany, the headquarters of Radio Free Europe were located in Munich with many transmitters along the country. One of those was a medium-wave transmitter in the International Broadcasting Bureau or IBB Station in Oberlaindern, an upper Bavarian village, a transmitter that functioned between 1951 and 2003.

Located only one kilometer away from the town of Oberlaindern, its approximately 103-meter-high radio masts produced a great amount of interference. Their inhabitants were able to experience the conspicuous accumulation of radiation as they saw melted faucets and pots, then their inhabitants faced a growth of diseases and even sleeping was difficult to achieve. The radio masts were so powerful that they could issue flux densities of up to 1 Megawatt²³ and even the organs of the Church turned into a sounding recipient.

The “acoustic smog” that they produced changed completely the life of this town. Here some extracts of interviews of a citizen initiative²⁴:

At the beginning ... the radio station didn't bother me at all. But all the disturbance to the telephone and other appliances began to make me

²³ Each antenna consists of a large field of soccer field with a transmission power of 250 kilowatts. This corresponds to more than 20000 mobile radio stations. According to Prof. Gunter Käs, who was the head of the Department of radar and electronics of the Bundeswehr University of Munich, the electro-smog in Oberlaindern was considerable; In a 2003 interview he said that the radiation was 16 percent higher than the limit value established. (Dankerl)

²⁴ Sender Freies Oberland citizens' initiative was an organization for the promotion of knowledge of the effects of electromagnetic fields on humans and nature. They made a series of interviews in order to depict the everyday life of Oberlaindern citizens. The complete version could be read in: Sender Freies Oberland e.V. in a translation by Colin Newberry / Organization for the promotion of the effects of electromagnetic fields for humans and nature e.V./Do you want us to pack and go? (Sender Freies Oberland e.V.).

suspicious. If I hold my hand about two inches over my CD player, the music stops. It's like a magic trick. I now have the third player within one year. When the loudspeakers are connected to it, it's real hell! I can hear the station loud and clear – but no music.

My answering machine starts up, although nobody has called me, and I can hear the broadcasting station on it. And when people do leave recorded messages for me, I can't understand them because they're all mixed up with music – the tape records the station. I can't take any calls after seven in the evening anyway, because all I hear over the phone is the station next door.

I'm 66 years old and have lived here ... about 900 meters away from the radio station. When we moved here, we got a stainless-steel washing up basin. That's when we first got to know the transmitter, because it sounded out of the basin. The basin had to be grounded and then the effect vanished...

When I want to record a TV program on video for my grandchildren, the set only records lots of stripes. You can see exactly from the structure of the stripes when someone's speaking and when there's a break.

Protests against the IBB station in Oberlindern produced a community project, a huge memorial of ten meters long, and nearly six meters tall. The figure of Schlaflos or sleepless an awakened man sitting on the edge of his bed with his elbows supported in his knees and his hands touching his chin in an attitude of complete frustration.

The warning-memorial was located in the area near to the station, the community took action to confront an acoustic-problem and its influence. This was a common situation for the Oberlindern habitants. It was designed by Willi Beuhaus and made it by the German sculptor Veronika Hagn-Roth in 2001. The transmitter was switched off in 2004 and the monument was dismantled in 2009.

3.2.4 Acoustic Indirect Memorials – Active approach

Table 4 Acoustic Indirect Monu-memorials – Active approach	
Permanent	Temporal
Das Geld, die Liebe, der Tod, die Freiheit - was zählt am Ende?	Monument to the Lost Glove
T4 - Memorial and Information Centre for the Victims of the Nazi Euthanasia Programme	Touched Echo
Shalekhet (Fallen Leaves) – Memory Void - Eckturm	Gedenkstücke
Yom HaShoah - the Jewish Holocaust Remembrance Day	Weiss104 (white 104)
Banner of Peace Monument	
* on digital media	
Kenotaphion	
StartEndTime – Sounds of the World Trade Center	
Memory Loops	
Le Chant des Sirènes	
Monumentos Sonoros	
World Trade Center Recordings: Winds After Hurricane Floyd	
Voyager Golden Records - Murmurs of Earth	
Manhathan Groud Zero	
Mahnmal Hören Buchenwald	
Das unsichtbare Lager Audioweg Gusen 79'53"	
Unfolding Spaces of my memory. Female Migration through Audio	
Memoryscape Thames	

Indirect acoustic monu-memorials with an *active* approach, are those that produce sound, but the spectator has to do something to play it.

In this category, twenty examples are classified (Table 4). Sixteen of these have a permanent character. Works that exist in digital media or digital form, web sites or cell phone apps even CD ROMs will be considered here as permanent. Five examples will be described in more detail. (Links for video documentation and more information can be found in Appendix D)

3.2.4.1 Permanent indirect acoustic monu-memorials – active approach

3.2.4.1.1 Das Geld, die Liebe, der Tod, die Freiheit - was zählt am Ende?

(Money, Love, Death, Freedom - what counts in the end?)

Permanent site-specific work. Located: Berlin, Germany. 2000. Day and night access. Designed by the German architect: Jochen Gerz.

This installation consists of two monitor screens surrounded by a frame located in the columns outside the courtyard of the Federal Ministry of Finance (former Ministry of Aviation). Passers-by can see and listen to 51 monologues of public servants, people that have worked in the building. Each monologue lasts about one minute and once the spectator presses the button located under each screen, three interviews are presented one after each other. They automatically are turned off until a next visitor is interested in interacting with the work (Figure 3-7).

The minimum desirable time of attention by the spectator is three minutes, the audio of the short monologues is in German; the video intertitles and the explicative texts below the screens are in German, English and French.

The work was commissioned by the Arts Council of the Federal Republic of Germany. Its purpose was to reflect on the history of the nowadays known as the Detlev Rohwedder House; the new venue of the Federal Ministry of Finance in Berlin after the return of the federal government from Bonn.

Gerz interviewed civil servants of the Ministry on video and asked them a question about what really counts for them at the end: money, love, death or freedom?

“The monologues of the civil servants reflected the topography of the site of the Ministry, which was first built in 1935 as the Ministry of Aviation, during the Third Reich. It was rebuilt after the war to become the communist ‘House of the Nine Ministries’. As one of the interviewees put it, « *freedom and death are especially close to each other here* ». Contributions also referred to the 40 years of the Communist state, to the post-war era in Western Germany, and the reunification of the country. Personal and often ambivalent memories of freedom, money, love and death follow one another. (Gerz)”.

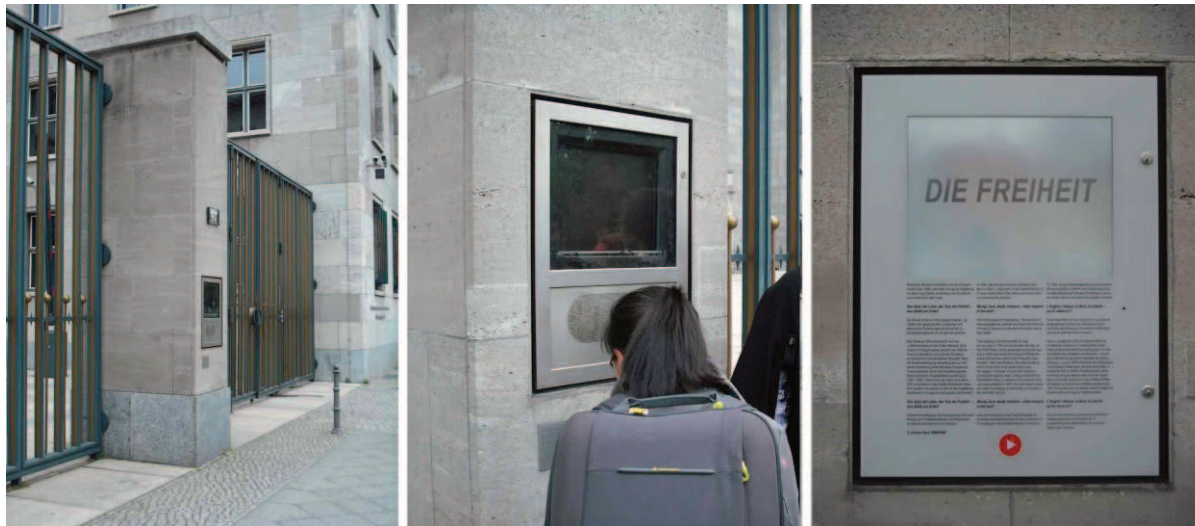


Figure 3-7 Details of Das Geld, die Liebe, der Tod, die Freiheit - was zählt am Ende?

Left: view of right column. Centre: detail of the right monitor. Right: detail of the left monitor (Photos: created by the author). 2014. JPEG file

3.2.4.1.2 T4 - Memorial and Information Centre for the Victims of the Nazi Euthanasia Programme

Permanent site-specific work. Located: in Berlin – Germany. 2014. Day and night access.

Information boards, videos and sound recordings, convey the details of the program for the elimination of sick and disabled people during the Nazi regime.

3.2.4.1.3 Shalekhet (Fallen Leaves) – Memory Void - Eckturm

Permanent site-specific work. Located: Eckturm in Libeskind's Berliner Jüdisches Museum, Germany. 1997/2001. Restricted access. Designed by the Israeli artist: Menashe Kadishman.

Visitors are encouraged to interact by walking on the piece (conformed by pieces that resemble circular human faces with their mouths open) and listen to the sounds when the metal pieces' touch, collide and jostle against other pieces. It is dedicated to the innocent victims of war and violence.

3.2.4.1.4 Yom HaShoah - the Jewish Holocaust Remembrance Day

Participatory Action. Located: Israel. Made (since 1959) every 27th of the Hebrew month of Nisan. Public Act. Performed by citizens.

It is a national Memorial Day. Sirens blare at 10:00 am for two minutes, Drivers exit their cars, people stop their activities, and everybody stand in silence in a collective action in commemoration of the Jews who died in the Holocaust perpetrated by Nazi Germany.

3.2.4.1.5 Banner of Peace monument

Permanent site-specific work Located: Sofia, Bulgaria. Inaugurated 1979. Day and night access. Suggested by the Bulgarian art historian Lyudmila Zhivkova. Carried out by a group of specialists under the leadership of the sculptor Kroum Damaynov.

The 37-meter high belfry and a circular enclosure of nearly 100 bells is a monument to the peaceful interaction of children from all over the world. A sign at the base of the monument instructs visitors that only children may ring the bells.

3.2.4.2 Indirect acoustic - active approach * on digital media

3.2.4.2.1 Kenotaphion

Double compact disc album. Author: British artist Jonty Semper. Released on 11 Nov 2001.

Jonty Semper made a compilation of all the two minutes of silence made at the Cenotaph Whitehall in London during the annual Armistice Day and the Remembrance

Sunday ceremonies from 1929 to 2000. 81 different tracks²⁵ that last from 0.06 sec to 2:08 min. The British Broadcast Corporation (BBC) had to transmit these two minutes of silence on live radio and on live television.

It is not a silent album in the strict sense, the chiming of Big Ben striking eleven times at eleven o'clock, the ambient sound as well as the microphone fizz can be heard.

He scoured archives to find the recordings. There are none for some years, including 1941 to 1944, when the ceremony was suspended. For some of the earliest newsreel he had to splice fragments together, looking frame by frame to see when the crowds doffed their hats. The variable sound quality of the recordings has not been evened out, so Big Ben sounds faint in some years, deafening in others. In 1932, somebody near the microphone was coughing miserably; in 1969, there were protesters yelling in the background; in 1982, there was torrential rain; and in 1988, a baby cried (Kennedy).

The title of the album, Kenotaphion, comes from the Greek and it means empty tomb, in this case, this double compact disc album is an acoustic monument erected where the institutional silence of commemoration is revealed.

3.2.4.2.2 StartEndTime – Sounds of the World Trade Center

Two audio tracks - Start time 2001.254.12:44:17.1360 UTC & End time 2001.254.14:56:05.7258 UTC. 2003. By the US artist: Mark Bain.

This is an unintentional memorial with two tracks for the anniversary of the twin tower collapse: Using seismological data recorded in areas of New England, New York

²⁵ To read the complete track list see: www.kenotaphion.org (Semper)

State and New Jersey as the World Trade Center buildings were collapsing on September eleventh, 2001.

3.2.4.2.3 Memory Loops

Virtual memorial. 2010. By the German artist: Michaela Melián

Online memorial dedicated to the victims of National Socialism. The interface shows a map drawn up by the artist of the city of Munich. The user can choose a point in the map and make a click to listen to audio tracks about the horrific event between 1933-1945. Texts and audio tracks in German and English.

3.2.4.2.4 Le Chant des Sirènes

Application installed on a cellular phone with Internet and GPS. Saint Laurent's River Bank - Quebec, Canada. 2011. By the Brazilian artist: Claudio Bueno.

It is an homage to 8 Canadian women who died at sea, who worked mostly on radio communication broadcasting in the ships during the first and second world war. The voices were recorded with singers of the Conservatoire de musique et d'art dramatique du Québec.

3.2.4.2.5 Monumentos Sonoros

Application that can be installed in a cellular phone with Internet access and GPS. 2011-present. Authors: Brazilian artist Claudio Bueno & local people.

In cooperation with local people real and fictional histories and memories are recovered and rewritten to create this platform that allows people to listen to sounds

produced in monuments around the world. For now, the monuments in the application are located in the following cities: São Paulo, Goiânia, Recife, Mexico City and Québec.

3.2.4.2.6 World Trade Center Recordings: Winds After Hurricane Floyd

Recordings. 1999 – 2002. Exhibited 2012. US Artist: Stephan Vitiello, Produced by Michael Raphael.

Involuntary monument. This is a multi-channel sound work done in a six-month residency in 1999. The studio was on the ninety-ninth floor of the World Trade Center (WTC 1) in New York. The artist recorded the sounds of the building and its surroundings. The work also captured the vibrations in the building when Hurricane Floyd swept the US east coast with winds up to 150 miles per hour.

3.2.4.2.7 Voyager Golden Records - Murmurs of Earth.

Disc. Launched into space in the Voyager 1 and 2 missions. 1977. Made by a committee chaired by US astronomer Carl Sagan and NASA.

Unintentional memorial disk. Contains a selection of sounds and images that represent planet Earth and humans. (section 3.1.3.1 on this document for more information).

3.2.4.2.8 Manhattan Ground Zero

Audio walk Manhattan, US. 2001. Produced by The Kitchen Sisters (Davia Nelson and Nikki Silva) in collaboration with NPR (National Public Radio). Narrated by Paul Auster.

It is a collection of radio stories and audio- recollections, commemorating the life and history of the World Trade Center and its neighbourhood.

3.2.4.2.9 Mahnmal Hören Buchenwald

Audio tour – Germany. 2002. Artist: Dunja Funke

Listening memorial. Thirty minutes in movement through the *Warning-Monument and Commemorative-Place Buchenwald* made in 1958, inside of the former Buchenwald concentration camp, today a commemorative place. Funke proposed a counter direction to the original official route proposed by the builders of the warning-monument.

3.2.4.2.10 Das unsichtbare Lager Audioweg Gusen 79'53"

Audio Walk. Gusen, Austria. 2007. Author: Austrian artist Christoph Mayer. Audio in German, English and Italian.

Following voices with headphones you could search for the memories encapsulated in the place. You could listen to the original recordings of personal memories of the survivors of the Gusen concentration camp in Austria, as well as today's Gusen residents.

3.2.4.2.11 Unfolding Spaces of my memory. Female Migration through Audio

Audio Walk. Cologne, Germany. 2014-2015. By the German-Brazilian artist: Johanna Steindorf

This audio walk focused in female migration. It works with the testimonies of 13 women who arrived recently to the city of Cologne in Germany. They share their experiences giving a glimpse about their opinion over gender roles and their perception of the urban space, intensifying the process of memory and experience.

3.2.4.2.12 Memoryscape Thames

Audio Walk with online download audio files and/or CD. London, UK. 2005. Conceived and created by the English cultural geographer Dr Toby Butler.

This audio walk integrates the oral history of people who live around the Thames Path. Each walk is about four kilometre long. As the landscape has changed, some tracks are already considered sound archeology.

3.2.4.3 Temporal indirect acoustic monu-memorials – active approach

3.2.4.3.1 Monument to the Lost Glove

Temporary site-specific work. Located: 23rd Street & Broadway, USA. Mar 17, 1997 – Mar 31, 1998. By the Russian- American artists: Ilya and Emilia Kabakov.

It is a life-size glove surrounded by nine metal stands in semicircle shape that resembles a concert. The stands have tables engraved with a 12-14 lines of text in French, English, German, and Russian. A concert of voices takes place if the audience decides it. The work commemorates loss.

3.2.4.3.2 Touched Echo

Temporary site-specific work. Located: Dresden 2007 & Osnabrück 2009, Germany. Designed by the Artist: Markus Kison.

This work was placed in two different cities and years in Germany. First in 2007 in the Brühl's Terrace in Dresden, and secondly in a bridge in the city centre of Osnabrück in 2009. In both cases the work used bone conduction. The viewers were invited to cover their ears and in doing so, rest their elbows on the balustrades of the place, allowing the sound to reach their ears through their bones.

The Dresden piece was related to February 13, 1945 when an air raid devastated the city, therefore when the visitor participated in the work, he or she could listen to the sound of airplanes and explosions as it occurred in the past. Through individual performances the viewer had the chance to reflect and meditate on the past events.

In the case of Osnabrück, the chosen date was June 20, 1940 in the frame of the World War II. The work was installed in the area where English B-25 bombers attacked the city. The sounds of airplanes and explosions could be heard here as well.

The spectators were required not only to cover their ears and support their elbows, but also to participate in the work when they were seen by others in the same body position that people had in the event of a bombing. The viewers became actors for the audience that observes them interacting with the work.

3.2.4.3.3 Gedenkstücke

Site-specific performed intervention. Located: Bremen, Germany. 2017. By the Artists Stefan krüskemper, Oscar Ardila & Michaela Nasoetio.

In the frame of the 25th anniversary of the events of Rostock-Lichtenhagen in 1992—a violent xenophobic attack against migrants—the piece was created to avoid what happened to be forgotten and invited the Rostock's citizens to participate in it.

People who liked or wanted to sing, were welcome to improvise lyrics based on real documents and facts, as well as to compose songs based on primary sources and personal memories from people that experienced the events.

Five different songs were developed in a cooperative process. The vocal pieces were performed live in a public act in certain memorial sites at the pogrom.

3.2.4.3.4 Weiss₁₀₄ (white ₁₀₄)

Temporary site-specific work. Exhibited in: Schloßfreiheit / Schloßplatz, Berlin. Germany. Only lasted 32 days (Sept 2 - Oct 3 -2000). A work by the German artists: Filomeno Fusco and Victor Kégli.

The artists installed 104 washing machines along the Berlin's Schlossplatz, where people were invited to wash their dirty laundry for free. Participants were 'forced' to wait the time the machine needed to wash, at least one washing programme, then participants had the opportunity to engage with others creating a sense of community. The place chosen for the open-air laundrette was a square historically saturated in the centre of Berlin, an examination of the place's history was also expected. Washing laundry in the past was an action that took place in public space and usually was performed by women. The invention of the washing machine brought this action to the private space.

Weiss₁₀₄ generated an inversion where private turns public and revived the past.

The sound of running washing machines allowed the participants to have uncensored conversations and contribute with their voices to build the acoustic space of the work. 'Wash your dirty linen in public'.

3.3 Case Studies

After defining the four resulting categories, I selected two cases, for further analysis: one example of the first category (Acoustic Direct Monu-memorials – Passive approach) and the other one of the second category (Acoustic Direct Monu-memorials – Active approach). I considered two case studies which are the most representative samples that can describe the overall characteristics and key features founded in an acoustic monu-memorial.

3.3.1 Sinti and Roma Memorial. Berlin - Germany

Memorial to the Sinti and Roma of Europe murdered during National Socialism
(Denkmal für die im Nationalsozialismus ermordeten Sinti und Roma Europas)

Commonly known by its short name: Sinti and Roma, the memorial is located in the north-eastern border side of the Tiergartenpark, the immediate vicinity of the Reichstag building in Berlin, Germany.

The history of this memorial began in 1994 when Dani Karavan received an invitation from Romani Rose (Chairman of the Central Council of German Sinti and Roma) to design a memorial for the Sinti and Roma. There were a lot of lives lost under the rule of the National Socialism, not only in Germany but also in other European countries. The

initiative for its construction was born in 1988 when the journalist Lea Rosh and the historian Eberhard Jäckel visited the Yad Vashem Memorial in Jerusalem and underlined the lack of a memorial for the Sinti and Roma in Germany.

A year later, in 1995 with an approved draft, the Berlin's Senate was commissioned to make the construction, but then debates began. The parts involved —the Sinti und Roma community, the Federal Government, the Berlin Senate— did not agree in some aspects of it. There were discussions over the right term to call it 'Sinti and Roma' instead of 'gypsies', if other minority groups would feel involved —Lalleri, Lowara, Manuschi or Yenish— and if they would even feel represented under the name 'Sinti and Roma'. Aspects such as the amount of people who lost their lives, as well as what was the most appropriate inscription for the memorial were also part of the discussion. The Sinti and Roma community "after a long period of political debate, ... finally agreed with the Federal Government and the Berlin Senate to supplement the memorial with a chronology on the genocide (Rose 15)²⁶". The name Sinti and Roma was chosen and the Sinti und Roma community proposed the use of the Santino Spinelli's poem *Auschwitz* as the inscription for the memorial, a poem written by a Roma author, musician and composer.

²⁶ Originally in German: Nach einer langen Phase der politischen Auseinandersetzung haben wir uns mit der Bundesregierung und dem Berliner Senat schließlich darauf verständigt, das Denkmal mit einer Chronologie zum Völkermord an unserer Minderheit zu ergänzen.

The decision of including the poem and a chronological text brought some changes in Karavan's design. When the construction finally began in 2008, new conflicts arrived, this time between Dani Karavan and the supervising senate authority over the materials and the execution.

After many delays and a citizens' initiative, led by the Roma Elders and coordinated by the European Roma Culture Foundation (ERCF) to pressure the completion of the work, the memorial was inaugurated on October 24, 2012, finally culminating its long construction process. Sinti und Roma survivors as well as some political personalities — like Chancellor Angela Merkel, and Federal President Joachim Gauck— assisted to the opening of the new commemorative place. The memorial is managed by the Foundation Memorial to the Murdered Jews of Europe.

The city of Berlin provided the property. The place assigned for the construction of the memorial is a 'triangular space between the Scheidemannstraße, the Ebertstraße and the Simsonweg in Berlin - Germany. This space located in the north-eastern border of the Tiergarten park is a corner that concentrates the passage of people that are going to the Reichstag or to the Brandenburg Gate on the opposite direction. Karavan usually works first by analysing the assigned terrain, "the location, the environment and the situation of the site dictate the form and the materials of the project (Karavan 55)²⁷", in

²⁷ Originally in German: Die Lage, die Umgebung und die Situation des Standorts diktieren dem Projekt die Form und die Materialien.

this case the constant flow of people through the chosen place was one of the first aspects that Karavan considered in the memorial's design.

A place chosen to commemorate requires a different state of attention where the spectator can have a more leisurely walk or a moment of introspection, characteristics that in a crowded corner of tourists and locals is not very easy to achieve. Karavan decided to avoid the construction of a vertical structure, and instead decided to include a water feature. The pond of water appears calm and undisturbed. It is contained in a kind of surface pond not very deep and only a few centimetres above ground level.

People who come to contemplate the water pond can see a triangle located inside it, an inverted black triangle, with the shape and colour²⁸ of the badge that all of those considered *asocial* in the Nazi concentration camps were obliged to carry. These 'unfit' for community life were the mentally ill, the homeless, the drug addicts, prostitutes, people with disabilities, the Roma and Sinti, among others. Karavan wanted this inverted black triangle to be unattainable for the viewer, giving him the scale at which the artificial pond needed to be built (it is twelve meters in diameter).

The inverted triangle is only visible from three points around the circular pond and not from any other position. Karavan extended the concept of the colour of the badge also to the water, he wanted the water to look black, therefore the base of the pond is dark. The darkness of the pond together with the stillness of the water simulates a large mirror

²⁸ "Males were later assigned a brown badge; while females continued to wear the black triangle, as they were stereotyped as petty criminals. The triangle incorporated a "Z" for Zigeuner, meaning Gypsy, placed to the right of the triangle's point (Crago-Schneider and Priddy Library)".

reflecting everything. A person can see its own reflection as well as of the people standing near her/him and of the surrounding: sky, trees and in a certain angle the Reichstag building. With this mirror-water-pond, Karavan manages to slow down the viewer's mood and place them in a state of contemplation and reflection.

The triangular structure of the centre does not touch the circular pond and in this way the water is not affected by its movement and remains calm. Karavan wanted this untouchable inverted triangle in the centre to adapt a support for a retractable stele for a daily offering. Every day at lunchtime a fresh flower is placed in the centre of the memorial. The person in charge arrives at the bottom of the memorial through a staircase connected to a tunnel (**Error! Reference source not found.** Right), lowers the triangular platform that reaches a special chamber below the pond, changes the flower and returns the platform to its original position at the surface. The process is invisible to the spectator, who only observes from the surface that the pond loses its central triangular granite slab for a few moments and emerges later with a new flower. The memorial is embedded with cyclical rituals, which also includes a musical piece played in a loop.

The flower chosen for the memorial represents the non-existent graves of the 500,000 Sinti und Roma murdered during the Nazi time. The flowers chosen for this

offering from a meadow²⁹ and according to Felizitas Borzym³⁰ the Israeli artist, leave nothing to chance. "He gave us a list of which flowers can be used ... feverfew, sunhat, snowball and phlox are on it, among other things". (Figure 3-8). "At the ceremony it was Eisenhut - a poisonous, also healing plant, which stands under nature protection (Keilani)".



Figure 3-8 Meadow flowers in Sinti and Roma memorial

Meadow flowers used in Sinti and Roma memorial offering (1) Monkshood/Eisenhut – *Aconitum*, (2) Feverfew/Mutterkraut – *Tanacetum parthenium* (3) Coneflowers/Sonnenhut – *Echinacea*, (4) Snowball/Schneeball – *Viburnum* (5) Flame/Flammenblumen – *Phlox*. (©Illustration: Luisa Roa. Calligraphy: Andrea Acosta-Camargo). *Tribute flowers*. 2018. Digital Image.

²⁹ List provide by Herr Karavan per e-mail on Mai 2018: Wild Flower: Local Wild Perennials Margarite / Mutterkraut / Akelei / Wegwarte / Rittersporn / Fingerhut (*Digitalis*) / Wiesensalbei / Grasnelle / Lichtnelken / Glockenblume / Lavendel / Karden / Disteln / Sonnenblumen / Sonnenhut / Malve / Ringelblume / Mädchenauge / Eisenkraut / Schmuckkörnchen (*Cosmos Bipinnatus*) / Löwenmäulchen / Zinnien / Lilien / Schafgarbe / Türkischer- Islandmohn / Phlox / Storchschnabel / Aurikel / Wiesenschaumkraut / Vergissmeinnicht / Löwenzahn / Winterschneeball (Winter) / Winterling (winter) / Winterjasmin (winter) / Nieswurz (winter) / Alpenveilchen (winter) / Silberkerze / Eisenhut / Hagebutten (winter) / Wildtulpen / Wildgladiolen / Bergastern.

³⁰ Felizitas Borzym from the Foundation Memorial to the Murdered Jews of Europe, whose foundation in 2012 was in charge of the Sinti and Roma memorial.

The descent of the inner triangle with the flower resembles the ritual of the descent of a coffin when it occurs in a funeral and the solemnity that this action entails in a mourning ceremonial act.

There is a sound element located precisely in the edge of the circular pond, where another ring-channel of 26 cm wide is situated. Here the water is in constant movement there. The water in the circular ring-channel falls into a small opening in the outer edge of the channel producing a constant and repetitive sound of water falling. This resembles an infinitely falling of tears. This dominant sound in the central part of the memorial and transmits tranquillity and relaxation.

<)) Listen

Audio Track 1. Sinti and Roma audio in water channel area

In this exterior metallic channel-ring is where the poem *Auschwitz* by Alexian —the stage name of Santino Spinelli can be found. The text has been cut out in metal letter by letter, forming the words of the poem in German and English. (Figure 3-9). If the entrance door to the memorial is taken as reference, the circle pool can be divided into two parts, on the right side of the circle is the German version and on the left side the English version of the poem. One follows the other and the spectator is invited to read and walk around at least a half of the circle. This mental reading is accompanied by the sound of the water falling and is in this inner reading that a new soundtrack is created.



Figure 3-9 Details of the Poem's channel – Sinti and Roma memorial

Left: Poem's channel without water (©Photo: Londoño) 2018. JPEG file. Right: Poem's channel with water. (©Photo: created by the author) 2018. JPEG file.

As the viewer moves away from the edge of the pond and begins to observe the surrounding soil, it is necessary to look more closely. The visitors will notice a number of fragmented irregular slabs of stone that expand in a decreasing pattern. In some of these stones the name of Nazi camps where Sinti and Roma died are carved; Labour, concentration and/or extermination camps like: Buchenwald, Dachau, Sachsenhausen, Neuengamme among others.³¹

³¹ There are about 70 engraving names in the memorial, here some of those names: Auschwitz-Birkenau, Westerbork, Treblinka, Belgrad-Semlin, Bergen Belsen, Lackenbach, Sobibor, Westerbork, Belzec, Tschernigow, Königsberg, Ravensbrück, Sabac, Niedernhagen-(wewelsburg), Litzmannstadt, Kulmhof,

Depending on the direction in which the viewer is and the light available, its readability changes. The sound of the falling water and the slow walk around the stones predisposes the viewer to think deeply about the events that occurred.

This action of walking and reading, generates an unintentional collective-performance. The stone slabs field or 'stage' produces a kind of *participatory memorial*. Delving into this topic in his general work Karavan mentions:

Most of my works create the space for this kind of performance where people act in a setting, I offer them. They walk, they stand, they observe — They move differently to the way they usually do ... I Think in some respect my work is figurative since without people it doesn't exist. These individual creations are not there just to be looked at. You have to be inside them and become part of them. And it's good if someone who enters these places sees other visitors moving around. Sometimes many, sometimes few ... each work makes different demands (Scheurmann et al. 96).

During 14 years, between, 1959-1973 Karavan designed stage sets for actor's groups or dance companies where he "has used set design as a laboratory for experimenting with human scale and space. He creates spaces of transition ... combines human interaction with the environment creating stages as spaces for contemplation and space for participation (Torres 56-58)".

Warschau, Auschwitz, Saliers, Kulmhof, Lublin Majdanek, Riga Kaiserwald, Mauthausen, Rymanow, Siedlce.

The landscape around also plays a key role in the memorial, the surrounding environment where viewers participate in this unintentional collective-performance developing a connection between the pond and the bushes, trees and glass panels that frame the memorial. Elements that contribute to create a circular and horizontal environment of homage and remembrance and also as Tímea Junghaus states:

... a successful idea of the artist was to settle the monument a little below the ground level, so that a kind of valley is created at the relatively small site; ... through the involvement of the visitors, the memorial site is transformed into a place of the frozen and institutionally administered past, in a place of self-evident encounter between present, past, and the official representation of the collective memory in a very subjective and personal way (74)³².

The poem can also be read in a stone tablet located in the south-eastern corner of the monument in four languages. There the title of the poem is mentioned, since in the channel around the pond the name cannot be seen.

Below there is Santino's poem *Auschwitz*, presented in all its different translations.

³² Originally in German: ... ein gelungener Einfall des Künstlers es war, das Denkmal ein wenig unterhalb des Bodenniveaus anzusiedeln sodass an dem relativ kleinen Standort eine Art Tal entsteht; ... Durch die Einbeziehung der Besucher wird die Gedenkstätte als Ort der eingefrorenen und institutionell verwalteten Vergangenheit in einen Ort der selbstverständlichen Begegnung von Gegenwart und Vergangenheit verwandelt und die offizielle Darstellung der kollektiven Erinnerung auf eine sehr subjektive und persönliche Weise erfahrbar.

Muj šukkó	Drenperdo Mui	Eingefallenes Gesicht	Pallid face
kjá kalé	phagede Jakha	erloschene Augen	dead eyes
vušt šurde	schiel Wuschtia	kalte Lippen	cold lips
kwit	Pokunipen	Stille	Silence
Jilo čindó	Phagedo Dschi	ein zerrissenes Herz	a broken heart
bi dox	kek Ducho	ohne Atem	without breath
bi lav	kek Labensa	ohne Worte	without words
nikt ruvbé	kek Asvia	keine Tränen.	no tears.
Romani	Sinti-Romani	Deutsch	English

The memorial entrance is located in the south-west area. It is placed facing the Simsonweg and consists of a metallic frame (2.50 x 1.78 x 1.82m height x width x depth) surrounded by frosted glass panels. There are four panels to the left of the door where the name of the memorial in German, Romani and English is written, and thirteen panels to the right is where the chronology of the crimes committed against Sinti, Roma and other minority groups between 1933 and 1945 can be found. Next to panel 13 is where the stone tablet previously described with Santino's poem is located.

These panels have the information in English on the side that faces the exterior of the monument and in German on the side that faces the interior. It is in these panels that the word gypsy appears in quotation marks, a word used by the Nazis, a word that was finally not chosen as the title for the memorial.

The chronological text has two didactical components: on the one hand the text provides an essential explanation to understand the facts surrounding the fatidic events

and thus arouse interest in a wider audience for future research. On the other hand, the spectators can reflect on what happened and discuss it whether with strangers or acquaintances who also read the chronology. At the end, in this action of reading the text in the memorial visitors allow themselves a moment of mourning and commemoration. In order to avoid that the informative texts could be a dominant factor inside the memorial Karavan decides to engrave them on frosted glass panels that also help to delimit the area of the memorial. (Figure 3-10).

On the opposite site, in the Scheidemannstraße, that is, in front of the Reichstag, another four frosted glass panels are located; Their engraved texts have a political tinge. One text is by the former German Federal Chancellor Helmut Schmidt and the other is by the former German President Roman Herzog. This area was the original entrance, but Karavan considered that it would be a narrow entrance and too fast to change the mood of the people who comes from visiting the Reichstag building.

The most conspicuous sound element present in the memorial is the sound of a violin. Karavan says about it:

As in many of my works, I wanted to incorporate sound into the monument, thinking that the tone of a particular violin used by Sinti and Roma would best fit. The intense and high violin sound should sound

louder at high background noise and quieter at low background noise, so that the visitors think that it sounds in themselves (57)³³.

Karavan was then trying to solve three aspects, the first finding a composition based on a violin tone, secondly deciding which would be the device to reproduce the audio-composition and thirdly looking for a mechanism to modulate the sound according to the surrounding sound in the public space.

About the first aspect the story of the composition, in the words of his prussian Sinto artist author Romeo Franz, is:

Romani Rose, the chairman of the Central Council of the Sinti and Roma, called me in 2012 and said he was looking for a violinist who could play just one single note at the ceremony. I tried, but at some point, I couldn't stand this note any longer. Instead I imitated a whistle that Sinti often use to call their children. It's a sound that each of us recognise, it's a bit like a mark of identification, a signal. Then I transposed it onto the gypsy minor scale. Shortly before the memorial was completed, I met with Dani Karavan, the Israeli architect who designed the memorial, at the construction site, and he said, "That's it!" For me, it was possibly the most significant thing I've ever achieved in my life (Gogos et al. 20)

³³ Originally in German: Wie in vielen meiner Arbeiten wollte ich auch hier einen Ton in das Denkmal integrieren und dachte, dass der Ton einer speziellen von Sinti und Roma genutzten Violine am besten passen würde. Der intensive und hohe Violinenton soll bei hoher Geräuschkulisse lauter und bei geringer Geräuschkulisse leiser ertönen, sodass die Besucher meinen, er erklinge in ihnen selbst.

His composition named: *Mare Manuschenge* /Our People can be heard almost³⁴ all the time at the memorial through 4 long loudspeakers located in the green area that surrounds the water pond. Four trees equidistant from each other, hide them, and reproduce the melody composed through the total area of the memorial. (**Error! Reference source not found.**)

<)) Listen

Audio Track 2. Sinti und Roma audio near trees area

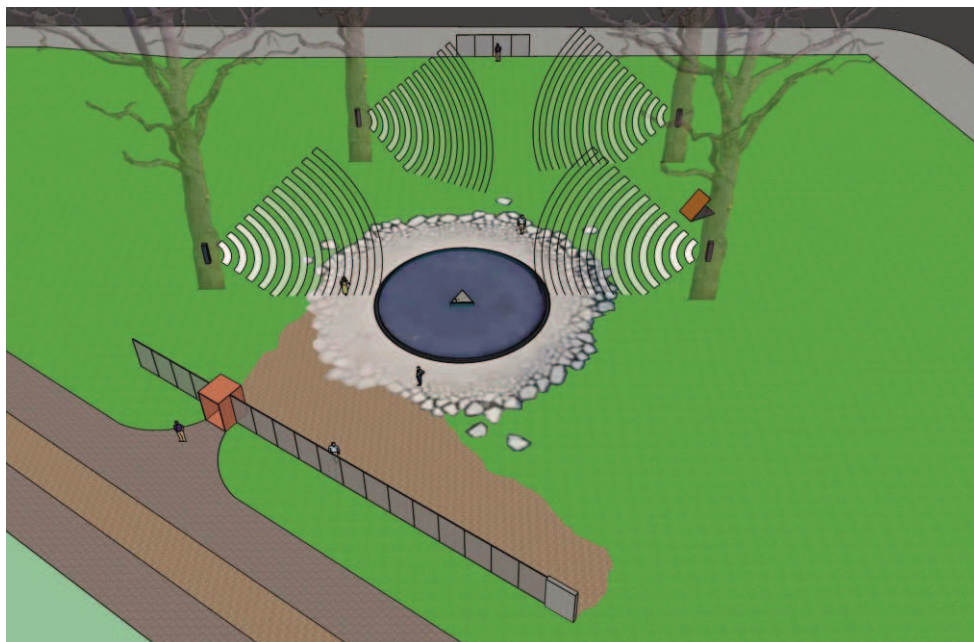


Figure 3-10 Aerial perspective drawing Sinti and Roma Memorial

Sound sources. (©Illustration: Prof. Guzmanruiz) Universidad de los Andes. Bogotá-Colombia. 2018 JPEG file

The violin composition with its steady tone is sometimes more audible and something less. By means of an automatic mechanism the sound changes, is louder or quieter

³⁴ It is designed to be working 24 hours, but due to maintenance the audio can sometimes be off.

depending on the ambient noise. Its constant accompaniment is not only perceived in the commemorative area but also in its immediate surroundings, around 15 to 20 meters in every direction, increasing the coverage area of the memorial.

In autumn and winter the audio composition can be perceived easier than in summer and spring because street musicians and countless birds are attracted by the good weather, thus fighting the acoustic space of the memorial. (See Figure 3-11). The street musicians are usually located about ten meters outside the main door of the memorial but if they use amplifiers their music can be perceived within the memorial.



Figure 3-11 General view – Sinti and Roma memorial

Left: General view in Autumn. Right: General view in Summer. (©Photos: created by the author) 2016. JPEG files

<)) Listen

Audio Track 3. Sinti und Roma audio with street musician

The memorial's sound can be perceived in the distance. It is possible to hear the sustained and sharp trembling of a violin tone that involves the space; a sound that resembles a cry, a constant and perpetual lament, that does not pretend to be sad but a vindicated clamour, it is like a volunteer contemporary *Plañidera*.

Plañideras are professional mourners, widely used in Central and South America, (even in Japan) where it is customary to pay women to cry at the funeral of a person and thus create a stronger public chorus of lamentation that underlines a loss.

Gilles Deleuze talking about joy and sadness³⁵ affirmed that if he would not had been a philosopher and if he had been a woman, he would have liked being a *Plañidera*, because that increases a lament, it is an art for itself and it is also brings an uneasiness. The history of *plañideras* are not new, they have existed since ancient Egypt. Then Plato (in the 4th century BCE) disapproved of hiring mourners at funerals. The strategies to make a more intense duel have changed with the time, and especially now that sound recording is available. The melancholic violin composition presented here as a public lament can be read as a solitary mourner for the Sinti and Roma, like the whistle of a mother calling their children who will not return, as a way of not leaving them in oblivion, a way of paying homage.

³⁵ In the ca. eight-hour series of interviews *L'abécédaire de Gilles Deleuze* with Claire Parnet, filmed by Pierre-André Boutang in 1988-1989, in *J as in Joy* (Boutang 1995, 2nd DVD).

With the use of sound this memorial has the power to conquer the space and change the feelings of the visitors immersed in it. Once the spectators are aware of the sound, they could be overwhelmed or not, the violin is not there alone, the audio loop mixes with traffic sounds, street noise, human voices, birds, and even the sound of water falling in the outer channel of the central pond.

The average intensity of sound measure that is regularly perceived in the areas near to the speakers is between 38 and 42 decibels (dB). The mechanism that automatically adapts the volume according to the surrounding ambient is right now set in its standard volume³⁶. The audio is only lowered in volume when an official celebration includes a musical presentation and then it is returned to its official standard volume. On the inauguration's day music was presented, the Berlin musician Slobodan Savić played the Sinti und Roma anthem: *Gelem, Gelem*.

There is a firm in charge of cleaning the water in the pond every Monday (Figure 3-12). The dirt produced by birds, the environment, and the coins that visitors deposit in the water are removed, a process that take three hours on average.

³⁶ Information given in April 2017 by the person in charge of replacing the memorial's flower.



Figure 3-12 Cleaning process in Sinti and Roma

Left: Cleaning firm doing their job. Right: Detail of the machine used. (©Photos: created by the author) 2018. JPEG file.

Trees without leaves in Winter make it easy to discover the loudspeakers that play the audio, but it is also not difficult to identify them when the trees are full of leaves during Summer (Figure 3-13 Left). The memorial has not suffered vandalism to the speakers, but the cables have been subject of theft, as well as some of the letters that make up the poem in the outer channel of the pond.

The memorial has security (24/7) and only closes when demonstrations take place nearby or on New Year's Eve.



Figure 3-13 Details Sinti and Roma

Left: Loudspeaker in Sinti and Roma memorial. Right: Access door for flower change. (©Photos: created by the author) 2016. JPEG file.

Dani Karavan (1930 Tel Aviv) Artist.

He includes in his works natural elements such as water, sand, sunlight and wind. He often tangles political and historical issues with the concept of memory and remembrance, encouraging visitors to have an immersive experience of his work. Karavan wants "to work for society, for people, to be in the middle of things and to react to human existence (Scheurmann et al., 80)"

3.3.2 Niche Monument. Cali – Colombia

Sculpture Homage to Jairo Valera

Niche is a monument in honour of to the co-founder and leader of the Colombian Salsa band *Grupo Niche*, the musician, vocalist, conductor and composer Jairo Varela.

The piece was the winner in the open call: *Cali territory of art: artistic-architectural interventions in the public space*, opened in August 2015. The competition was organized by the city of Santiago de Cali and the Ministry of Culture and Tourism in Colombia.

The monument was designed by a Colombian team. An architect: Fredy Pantoja, an artist: Lucía Alba, and a group of architects, engineers and designers³⁷. As the goal was to make an homage to Jairo Varela, they began to create a theoretical-conceptual framework around Varela's legacy: his *Niche Group*.

The band was founded in 1979 in Bogotá. In its first formation, the *Niche Group* was completely composed by *Chocoanos* based in Bogotá, the Colombian Capital city.

Chocoano is the demonym used to refer to the people from *Chocó*, a department in the Colombian Pacific coast, inhabited predominantly by Afro-Colombians. The word *Niche* is used in most cases to refer with respect to a black woman or man and as the band was formed by black musicians, the band chose the word *Niche* as part of their name and the

³⁷ The rest of the team: Sound engineer: Marcela Mejía; Architects: pantoja arquitectos – Sebastián Castaño, Alex Rodríguez, Nicolas rosales, Leonardo Fontalvo, Juan Camilo Montero, Edward Nuñez; Assembly engineer: Jhon Henry Aristizábal; Graphic designer: Jhon Vargas; Manufacturing engineer: Juan Manuel Duque; Structural engineers: Iván Vergara, Carlos Posso, Julian Ortega; Electrical engineer: Carlos Castaño.

Grupo Niche was born. Varela remained with the group from its foundation until his death in 2012. He also worked as its producer, arranger and percussionist.

At the beginning of the creation of the monument, Pantoja and his team had a clear conceptual idea about what type of monument to create to remember this great musician's legacy. The monument needed to involve music and sound, then in order to give it shape they explored six different axes, namely: Identity; Composition; Niche group; Winds; Idiosyncrasy; and Salsa-party & rumba.

"We focused on the identity of Jairo Varela, not from the point of view of his face but from the point of view of his musical talent (Pantoja)". This aspect led them to the great Varela's contribution to salsa, the fusion of folk rhythms of the Colombian Pacific coast with the Afro-Antillean genres used in Salsa at that time.

Varela was a talented musical arranger and composer, therefore Pantoja's team decided to decompose or split some of his songs in its different parts and include these differentiated parts in the design, so people could appreciate his skill and talent. The song chosen to inaugurate the monument was *Cali Pachanguero*, a 1984's composed by Jairo Varela. This Song became the unofficial anthem of the city and is considered a tribute to the city of Santiago de Cali.

Pantoja's team spent a lot of time analyzing the group's logo through its discography as well as the aesthetic of the group's covers and albums. They noticed that in many of them, the word *Group* was not written, or it had very small letters and on the contrary the word *Niche* appeared in large letters and occupying a larger area on the

covers. They materialized it with a 24-meter-width sign of the word *niche* in galvanized steel painted with gold synthetic enamel colour.

In general, the instrumentation of the group is shaped like this: in the voices: leading singers and choruses; in the rhythm section: timbales, congas, bongo, maracas, cowbell, güiro; in the harmonic section: bass, piano and winds like saxophone, trumpets and trombones. Pantoja quotes his friend, writer and music critic Rafael Quintero who said about Varela that “in addition to an innovative use of the winds, he used the trombones and trumpets of heavy salsa, adapting them to his own style. Before Niche, that did not happen in Colombian salsa.” It marked an identity in Cali’s Salsa, and this remark guided the design towards the wind instruments.

John Vargas, the graphic designer in Pantoja’s team, and a passionate for typography, began to explore different letters inspired by the forms of wind instruments, especially trombones and trumpets. With the group contributing more ideas, the shape of the five letters that conform the monument finally began to emerge. “we arrive at a mid-point where its reading is neither so clear nor so abstract (Pantoja).” (Figure 3-14). The word *niche* in its wind typography is not revealed at first sight, it requires careful observation of the spectators.

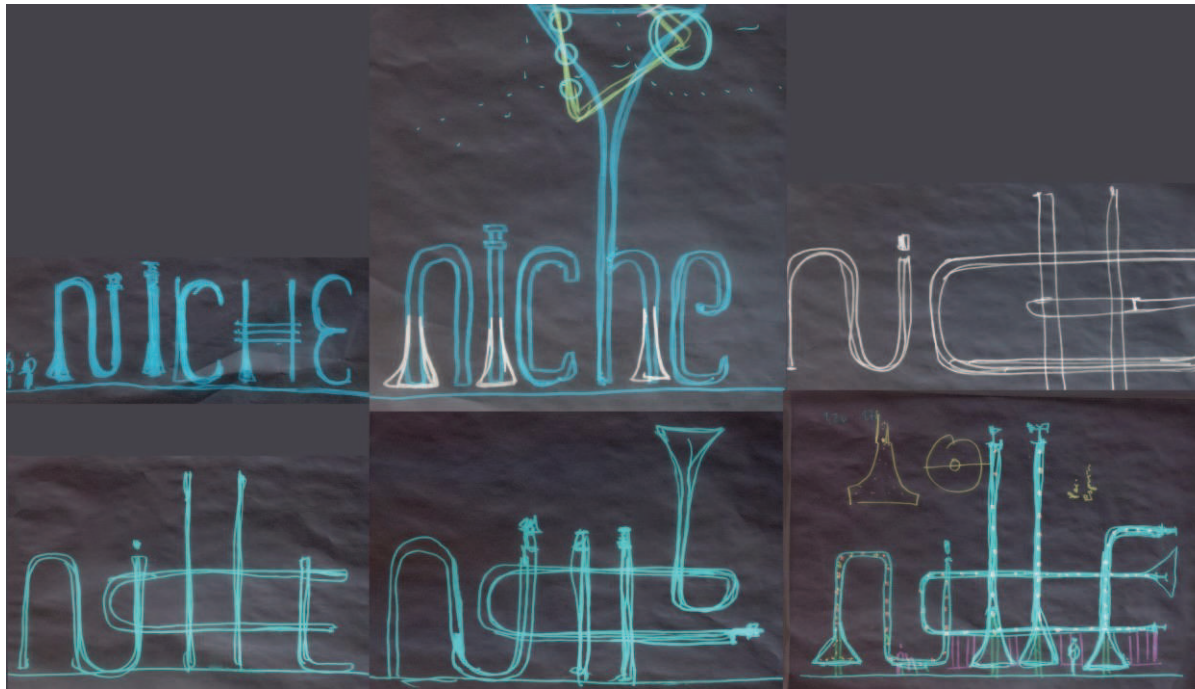


Figure 3-14 Niche's sketches

Some of the preliminary sketches of the word *Niche* (© Fredy Pantoja Arquitectos) *Identidad y Grupo Niche*. 2015. JPEG file

For the idiosyncrasy, *Pantoja Arquitectos* decided to analyse the lyrics of Jairo Varela's songs. This research led them to discover that "he writes to the landscape, to the people, to the sport -he was a fan of the *America* (the local football team)- to dancers, to Cali, to the Pacific, to food, to machismo." (Pantoja).

Lastly, in the Salsa-party & rumba aspect they decided to work on the meaning of salsa in Cali as an urban phenomenon. The signs made in neon or tungsten's lights of salsa bars that Varela liked so much served as inspiration. All the popular aesthetics that revolve around the salsa culture in Cali considered by many to be the world capital of salsa dancers were used.

The final design of the monument included characteristics of every axe explored. The word *niche* was shaped leaving four bells that can interact with the spectators. (Figure 3-15).

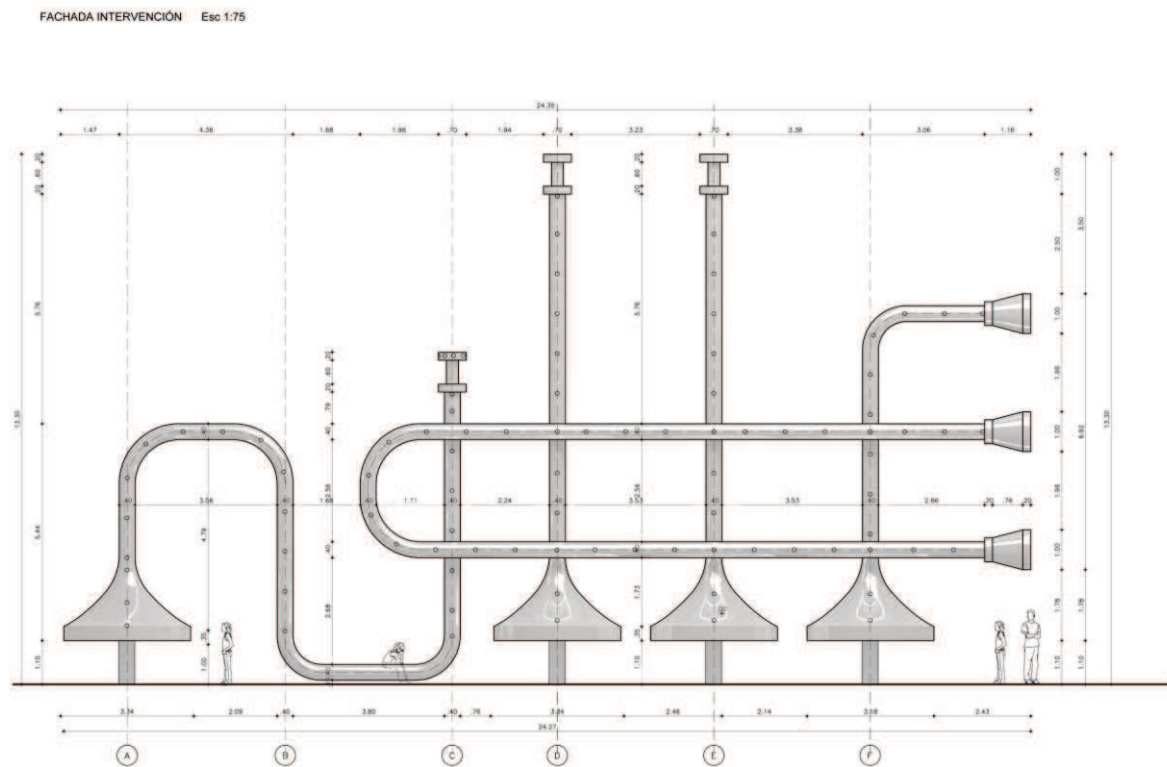


Figure 3-15 Niche's Façade Plane

Final design presented to the open call contest. (©Fredy Pantoja Arquitectos) *Fachada Intervención Esc 1:75*. 2015. JPEG file

With four bells to interact, the decision was to place in each one of the bells one section of a Varela's musical composition (Figure 3-16). A song was split then in three sections: rhythmic section (percussion [Audio Track 4]), harmonic section [Audio Track 5] (bass, keyboard, winds), and melodic section (vocalist and choruses [Audio Track 6]). In the remaining bell (located in the letter n) it is possible to listen the sum of the previous three, the complete song [Audio Track 7].

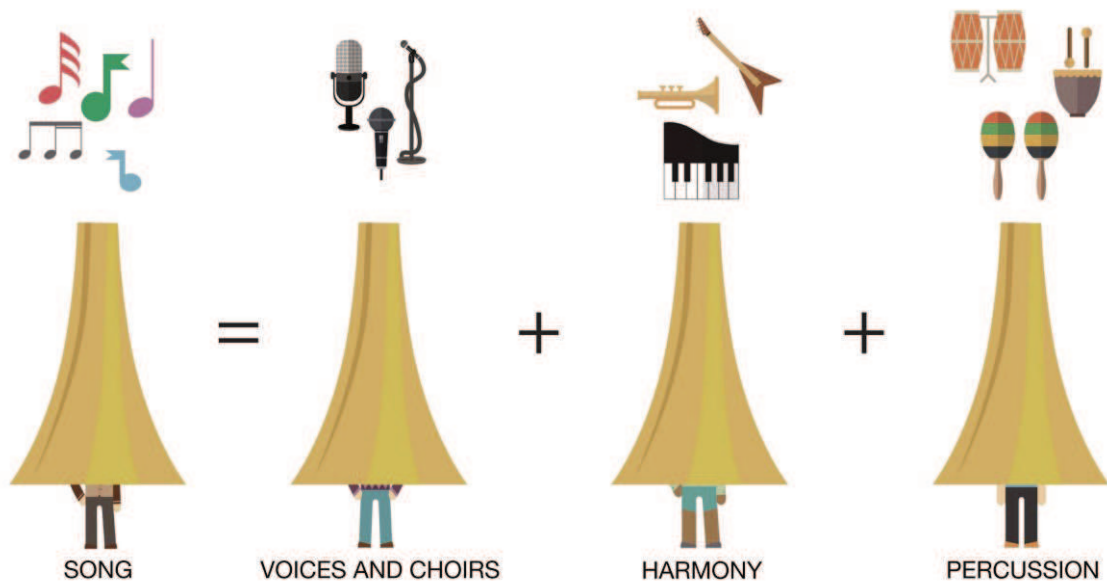


Figure 3-16 Bell division in Niche's monument.

Final order implemented in the monument. (©Fredy Pantoja Arquitectos) *Composición*. 2015.
JPEG file

The reproduction of the song in independent sections allows a different approach to the musical legacy of Jairo Valera, on the one hand it is quite pedagogical and on the other hand, it sensitizes the listeners. The musical material divided into sections was exclusively made for the monument by the current members of the Grupo Niche who recorded the song *Cali Pachangero* separately with its actual director José Aguirre.

<)) Listen

Audio Track 4. Niche Monument rhythmic section

Audio Track 5 Niche Monument harmonic section

Audio Track 6 Niche Monument melodic section

Audio Track 7 Niche Monument complete song

The design of the monument invites the viewer to explore the audio in each bell and requires him to bend a little to enter the interior spaces of the bells and once there,

enjoy the audio. Inside, the spectator can also read on the inner surface of the bells, texts with extracts of some compositions of Varela. These texts were the result of the dedicated selection of the artist Lucía Alba in the search for the most significant fragments in Varela's compositions where the viewers could appreciate the creativity of their lyrics, highlight his compositional talent, as well as to taste the idiosyncrasy of the Pacific coast of Colombia. (For the complete texts see Appendix E- in Spanish).

Some phrases were printed on light reflective paper, so when a photo is taken with flash, those phrases stand out from the rest of the text. (Figure 3-17).



Figure 3-17 Detail of texts inside the first bell (rhythmic section).

(©Photo: Ruales Alvaro) *Niche photo series 12*. 2016. JPEG file

These texts were proposed to resemble Varela's compositional process. Elements from here and there were taken; A cloud of words and apparently unconnected phrases slowly

began to make sense. The lyrics reflect the Choco and Valle's culture. Intentionally crafted without punctuation

Something unintentional that has happened over time is that in the bell where the song sounds complete, people have been stealing the letters, then the words are grimaces and then it is more cool because there are a few words that are understood a little and others that do not have sense and then gives more the feeling of a thought, because there are ideas that one cannot download and cannot be captured... in all the bells the text is different (Pantoja).

The spectator then can read or listen. The system by which it is possible to listen to the sound elements is a single device that is both player and amplifier and that has the four channels necessary to send the corresponding audio to each bell. An amplifier, a small sound system and ceiling speakers (one per Bell).

The volume of the monument was tested not to be so high that the audio of a bell interferes with the next bell. The bells are about one meter apart from each other and if you are in the bell that plays the voices and chorus you can hear timidly a bit of the harmonic section, if you are in the bell that plays the percussion you can hear a bit of the harmonic part, if you are in the harmony bell then you can hear a bit of the other two. For the opening day it was suggested to put the sound a little louder, therefore the audio of each bell subtly interfered with the sound of the other one. It is a cultural characteristic to listen Salsa at a high volume and that is why it was requested on that day.

The average intensity of sound that is regularly perceived in the area near the bells and inside the bells is between 60 and 74 decibels (dB).

Two meters from the sculpture is a basement where the sound console is located. There the sound system is turned on and off. A person from the Jairo Varela's Museum is, at the moment, in charge of doing that. She turns it on when the museum opens and shuts it down at night. At the *Cali's Fair* 2015 a cultural event famous for a Salsa marathon, the monument was lit until 3:00 AM. Since then it has become a meeting point to end the party in the city. Nowadays it has been decided to turn it off earlier to avoid disturbances made by drunk people who disturb the peace of the square.

The monument has a line of warm lights that surrounds the letters and their joints, a warm light system that resembles the aesthetics of bars and salsa nightclubs. These lights are located on the side of the monument that faces the car avenue, giving an extra appeal at night (Figure 3-18).



Figure 3-18 Niche Monument at night

(©Photo: Ruales Alvaro) *Niche photo series 10*, 2016. JPEG file

The structure made in homage to Jairo Valera where people can appreciate his compositional skills, allows one not only to meditate on his great contribution to music but also its design creates the perfect scenario for a public dance floor. It becomes a social space that allows people from different generations to gather (Figure 3-19), creating a sense of community and belonging and to share a sound experience.

The shape of the bells amplifies naturally the audio and isolates the acoustic space of the visitors. The height of the bell intentionally alters what you can see of the person standing inside the bell. So, it looks like their heads have disappeared, thereby giving the spectator a private space inside a public environment. Strangers and acquaintances dance and sing without fear of being judged in their abilities.

The monument also allows people to lie down or sit down in its structure. The bells can protect people in case of rain or strong sun. Its privileged location in the center of Cali makes it a monument well visited and recognized.

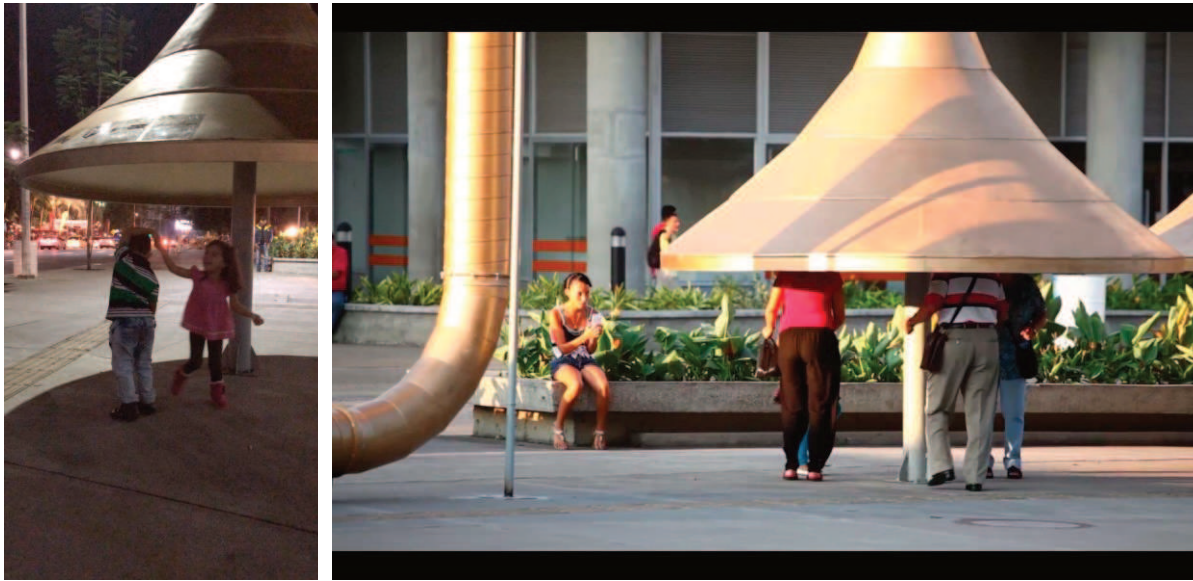


Figure 3-19 Spectators dancing at the monument

Left: Children dancing. (©Photo: Fredy Pantoja). 2016. JPEG file. Right: Children dancing. (©Still image from video Ruales and Pantoja Arquitectos min 1:16) *Niche Escultura Homenaje a Jairo Varela*. 2016

At the time of the contest, the monument was proposed to be located in a plaza near one of the main avenues of Cali, behind a large rectangular planter, a little further away from the pedestrian area (Figure 3-20).



Figure 3-20 Renders Niche monument proposal

Up: Top view render. (©Photo: Fredy Pantoja Arquitectos) *Localización*. 2015. JPEG file. Down: lateral general view render. (©Photo: Fredy Pantoja Arquitectos) *Niche*. 2015. JPEG file

The site chosen was above an underground parking lot. Building the monument there would have increased significantly costs, therefore, they decided to move it a few meters near the pedestrian zone, in an area that could be considered the end of the axis that comes from the Municipal Administrative Centre (C.A.M.), at the top of a pedestrian circulation axis that runs through the City Hall of the city. (Figure 3-21)



Figure 3-21 General view of Niche monument

Up: Back view of the monument (©Photo: Ruales Alvaro) *Niche photo series 05*. 2016. JPEG file .
Down: front view of the monument (©Photo: Ruales Alvaro) *Niche photo series 02*. 2016. JPEG file

We consider that our intervention should be an invitation to passers-by to enter the square and discover the Salsa Museum "Jairo Varela", which is located in the second floor of one of the buildings that are part of the plaza. We chose a playful and striking piece that gave more visibility to the museum. For these reasons we located our intervention in the axis of pedestrian circulation between the two towers of the C.A.M., the pedestrian access to the square before *de la Caleñidad*, now *Jairo Varela*, and the pedestrian crossing; without leaving aside the importance of the number of people who travel by car on the second North Avenue (Pantoja).

The orientation of the monument was also widely analysed, and it was decided to give priority to the lecture of the word *Niche* to those who are traveling the city by car: "the one who is in a hurry, to the driver who has not time, to those who are on their way to the airport or tourists who do not leave their Taxis, they all at least can say 'says *Niche*'"(Pantoja). For visitors who access the square on foot and perhaps have a little more time, the monument can be discovered little by little, since intentionally the word is readable like in a mirror.

Despite its young age the monument has already become an emblematic object and has been incorporated as one of the symbols of the city. Appropriated also by street artists and depicted in informal murals in the city (Figure 3-22)



Figure 3-22 Mural of Cali's landmarks

Street Mural showing four representative places of the city of Cali, from left to right: The River Cat, Niche Monument, the Three Cross Hill and San Antonio Church. Author of the mural: Unknown (©Photo: Jhon Vargas) Cali. 2016. JPEG file

3.4 Summary

Naked eye observations and analysis of video-documentation were also used in the data collection. Direct observations were only possible in cases where the acoustic-monu-memorials are still on display and functioning. The video-documentation was found mainly in the virtual portfolio of the artists or authors or was supplied by tourists who visited these places. Mostly these videos are on platforms such as YouTube or Vimeo. (For the list of documentation see Appendix D and information).

Some videos present a complete audio-visual documentation, while others were originally created for the purpose of presenting only the visual part of the monu-memorial, which is why some of them lack the relevant information to this research as the original sound; to some of the videos a soundtrack was added and to others the audio was muted. Despite these limitations these video-documentations were considered pertinent in the analysis of the behaviour and attitudes of the spectators towards acoustic monu-memorials.

Acoustic monu-memorials are trying through sound to approach other ways of sensitizing the way citizens experiment with memory in public spaces. The range of possibilities is broad as demonstrated by the number of examples of different nature described in this chapter:

Acoustic monu-memorials require time from their spectators to listen the audio, and in the most cases the public has to stand because no chairs are provided.

The interruption or disturbance of the quietness of a place is generally socially accepted if the acoustic monu-memorial works temporarily or if the chosen location is far away from residential zones.

Only those who read music can approach a second layer of meaning hidden in acoustic indirect monu-memorials, which often use musical notes in their design.

Normally, the spectators welcome the challenge of finding or discovering the sound in a monu-memorial, either with a simple action like walking or making a special movement.

Suddenly visitors can become actors. Spectators can be passive or active, and this action can be individual or collective. The proposed platforms are designed to be either participatory or/and performative. With participatory is understood here something that is 'already finished' as a sound walk, and/or performative where contributions from the spectators are expected.

Each place and each monu-memorial require different volume level. Regulations about the level of noise tolerance in each city is different, in some cities these restrictions are stricter than in others. The author of the monu-memorial can have a dB level in mind but once the implementation is done, that decision is not usually under her/his authority.

Acoustic monu-memorial's perception also changes in relation to the location. Monu-memorials are in their majority site-specific works. Cities with seasons have at least two different acoustic environments, one quieter in autumn and winter and a period more altered in spring and summer when trees are full of birds and music artists take to

the streets. In cities without seasons the amount of sound and noise is more or less constant all year round.

Acoustic monu-memorials require multidisciplinary working groups: architects, artists, designers, even lawyers as well as several contractor firms are needed, as well as engravers, sound engineers, structural engineers, electro-installations and many others.

Quantitative analysis in the amount of sound monu-memorials show that six examples were created before 1971, four during the 70's, two during the 80's, seven during the 90's, 16 during the 2010's, 16 during the 8 years of this decade, (see Appendix F). Six examples prior to 1971 were included because of the contribution to the present research and for future investigations.

Although it seems at first sight that the two case-studies selected in this chapter are opposite in their intentions, there are some details that make them similar.

Both require daily maintenance, the *Sinti and Roma Memorial* requires someone to change the flower every single day, and the *Niche Monument* requires that someone turns the sound on every day. Although both requirements are different in their nature, each needs the constant presence of a person or a firm in charge. This generates additional expenses compared to the normal maintenance budget with a conventional monument or memorial.

Another aspect involved is security. Acoustic monu-memorials located in public spaces require an audio reproduction system that might be exposed to vandalism. Not

only can their non-acoustic parts can be stolen or tagged with graffiti, like the letters inside the “bells”, in the *Niche monument*, but the theft of an audio system component would stop its function, like some loudspeaker wires which were stolen in the past in the *Sinti and Roma memorial*.

In addition to the normal budget required for a monu-memorial it is necessary for the acoustic variant to add a second budget to include equipment security issues. Only this will guarantee its long life. A memorial with naked speakers will not survive a long time in some cities unless the memorial has a 24/7 security.

I hope that this panorama of examples amplifies the knowledge about acoustic monu-memorials and brings new perspectives not only for those who are usually in charge of the design of monu-memorials in the city but also for the citizens who are gradually being integrated. Projects such as the Monument Lab³⁸, a public art and history initiative based in Philadelphia, which aims *to unearth the next generation of monuments* realizes the need to include the voices of the general public in the design of future monu-memorials.

Memory and history are a complex constellation of factors. The challenge is not only to design monu-memorials according to new patterns of perception but also

³⁸ See (Murals Arts Philadelphia) a project where the researchers ask to the public to propose monuments of what they consider to be appropriate. The project collects the drawings proposal made by the public and creates a database for exhibition and research purposes.

include subjects and topics that until now have not been represented in commemorative public spaces.

3.5 Findings: Sound Spaces

The strategies used by the creators of acoustic monu-memorials (independently of their life span) showed different forms in which sound shapes, modifies, transforms, and structures public space beyond the visual components. The analysis of these strategies will be named here as *sound spaces*. They function in monu-memorials by:

1. Delimiting 'private' audible areas

In the *Sonic Commons* of acoustic monu-memorials where anyone can become an 'earwitness' to the actions of the others (Auinger & Odland, 64), some monu-memorials proposed the creation of 'inside private' audible areas where visitors feel as if they were in a private sub- fragmented space.

This is the case of *Women of Ravensbrück – Ravensbrück Memorial* where the low heart beating sound emitted in the area around the stainless-steel column delimits the space in a such of way that the visitor is acoustically isolated from the rest of the space, allowing her/him to enjoy the sound as if she/he was alone. A similar situation occurs at the *Niche* monument where the music played inside the 'bells' creates an invisible wall in which the spectator can dance and sing freely. The space can be felt as a small private 'disco' room within the public space.

2. Creating points of reference and orientation or turning them into *Soundmarks*

Bells are a strategy chosen by monu-memorials that are considered points of reference. Their toll can be heard in the background in a predictable way, clearly distinguishable from the ambient noise, characteristic of what Truax (21-22) considers a keynote sound. The *Freiheitsglocke* or freedom bell, located in Berlin which sound is identifiable and heard every day is a soundmark that represents Berlin sonically creating a continuity with the past, building in that repetition a sense of belonging and reinforcing identity. Another example in the same line is the *Children's Bell* in Bodega Bay, California where the sound of their bells has been heard since 1996.

In a second aspect the *Niche* monument is the 'house' of the unofficial anthem of the city. The music is a soundmark of the city, and the physical shape of the monument is a point of reference and orientation. This example is at the same time a point of reference and a soundmark.

3. Suggesting corporal movements

Monu-memorials that concentrate on corporal movement made in response to a specific sound and ask the visitors to recreate this action at the moment of experiencing the work, explore in their design the *moment of performance* where the space, sound and memories become evident (Pistrick and Isnart, 508). The case that best exemplifies this idea is *Touched Echo*, a monu-memorial where the viewers are invited to cover their ears to listen to the sound of war airplanes. The natural response to a sound and the action required to hear it, reinforces the aim of the monu-memorial.

4. Generating a collective specific mood in the visitor

In the *Sinti and Roma memorial* the sharp sound of the violins creates a melancholic mood in the visitors. Also, actions performed by citizens are another strategy. The *Yom HaShoah - the Jewish Holocaust Remembrance Day* creates an act avoiding every production of sound and gives the space a bigger scale with the intention to change the mood of a collective. These *Performative Monu-memorials* transfer memory and knowledge through a ritual action.

5. Expanding space limits

Crossing a cliff and touching the sea is what allows the natural ambient sound characterize the monu-memorial *Passages*, to extend the limits of the physical area of the monu-memorial. Maciá in his *Scenario in Construction*, in which a 'sound bridge' is created between the inaccessible roundabout and the surrounding areas, also uses this strategy.

A third example in which the limits of space were expanded was *Voz Alta*, not only because of the use of a megaphone, but also due to the use of the radio that reached the acoustic space of Mexico City and a couple of nearby cities.

6. Demanding a consensual space

Another strategy used by monu-memorials in which sounds require more attentive listening is the requirement to agree verbally or bodily in order to listen to the emitted sound. Some of the examples unfold their sounds in such a subtle way that if there is no silence among the visitors it is not possible to listen to them.

In the comments section of *the Sibelius Monument's* documentation many users ask if the monument actually emits sound or not. In all of the videos observed, at the date of this investigation, visitors suggest that it is a matter of luck to hear the sound produced by the wind through the tubes that form the monu-memorial. The explanation is that you have to visit it on a windy day and secondly that the people around have to agree to remain silent during the visit.

7. Offering a narrative and/or pedagogic space

The construction of a sound space of memory and history was explored by Mayo *Los sonidos de la Plaza [1945-2001]*, a monu-memorial based on audio archives. Relevant sounds of Argentina's history were chosen and presented in chronological order in a public space, and therefore open to everybody. *Sound node signals* is an example where people from different generations have the possibility to create a narrative, to have confrontations, and discussions not only about the past but also about the possible futures.

In the same line 1914-2014 *Eine Zeitreise Time travel through 100 years* is a monu-
memorial where the pedagogical concept is supported also with moving images.

8. Trans-locating

Entfernte Züge (Distant Trains) and *Sound Island* are examples of monu-
memorials that transform and structure public space through the exploration of the
trans-location of sound. That is to say, they play or transmit recorded audio from one
location into the other. The sounds from different cities and spaces are presented in order
to reinforce the links between memory and places and to make them more immersive.

9. Building a Trans-temporal space

The recreation of reliable sounds of a time transferred to another helps to generate spaces
of commemorations, reflection or mourning. This strategy can be found in *Nachklang*,
Estruendo and Estrépitos and *Radio Espectros*. Once the acoustic space is generated, the
audio helps citizens to construct their narratives and their history.

10. Creating void

Another type of *sound space* founded in monu-memorials consists in the strategy of
'saturating' space with sound and then 'de-saturating' it. Once it is done, the spectators
perceive the space empty. *Time Piece Stommeln* used this strategy to awake a collective
urban experience of change of perception, that affects you and your activities.

11. Shaping urban identity

As a last aspect I would like to mention the incorporation of the physical and sonorous elements of monu-memorials as part of the symbols that identify people with a place. The adoption of these symbols become tangible once they begin to be reproduced in tourist guides, murals and souvenirs.

It is remarkable to observe that even though the indirect audio monu-memorials do not have a perceptible sound, they arrive at forming a *sound space* of gathering and remembrance. This is primarily the case of the Michael Jackson's and di Lasso's double memorial, the Liberty Bell, the Jewish Mahnmal in Buchenwald, and Schlaflos.

4

“place is sensed,
senses are placed;
as places make sense,
senses make place”
Steven Feld (91)

4 Conclusions

The research revealed that sound (figurative or abstract) is tightly intertwined with the symbolic, communicative, and mnemonic nature of human beings, and therefore essential to plan and create *monu-memorials* in public spaces.

The main outcomes of this research are:

1. **Research tools and Vocabulary** resulted from the transfer of visual elements into acoustic terms
2. **Findings** were based on the strategies used by the creators of monu-memorials
3. **Suggestions** were condensed in the *Urban Acoustic Commemoration Code*

The first outcome arose from the idea of transferring Lynch's five elements that help individuals to orientate themselves in urban situations, and to build the *image of the city* (45-49) into the following acoustic terms: *Acoustic communities*, *sound node signals*, *acoustic profiles* and *acoustic horizons*, *sound path signals*, and *acoustic marks*. These five elements are new meaningful vocabulary for architects, urbanists, landscape planners, artists, designers, sociologists and other professionals who create *monu-memorials* in order to expand their spatial character and re-think memory, commemoration and identity. Sound can help *monu-memorials* to be designed as small drops in a specific surface of a city, as an element in motion that emits an acoustic path, determine the acoustic limits of a collective, or function as a city lantern sending signals or even "meeting" neighbours through sound.

Through the analysis of the strategies used by the creators of the research examples and their technologies, a second outcome was the announcement of *sound spaces* (spaces analysed in the previous section) that allow us to perceive the strategies used by acoustic monu-memorials to shape, modify, transform, and structure public space beyond the visual components.

Others relevant conclusions were:

At the beginning of the research I considered that the examples located in virtual spaces were in a public space. I was however aware that was not totally true, since a 100% accessibility for everyone is not guaranteed. The technology available until now gives us the possibility to passively listen and actively upload audio contributing to develop the virtual monu-memorial. Today's technology is not able (yet) to change or modify the acoustic space of the recipient. Or at least I am not aware yet of the existence of this kind of technology.

The results showed that most examples are temporary sound installations rather than permanent commemorative places that play audio constantly, loudspeakers are the most frequently used device for the reproduction of audio in permanent *monu-memorials* located in public spaces.

Another relevant conclusion was found to be the tendency of encouraging participation from the spectators, as well as a pedagogical interest in learning from the past as the main purpose of their design, creation, and installation on many of the analyzed examples.

The number of monu-memorials encountered in public spaces has been growing during the past two decades. Therefore, it is possible to predict that this will be a desirable future for the planning and creation of *monu-memorials*.

The hypothesis that the more the possibilities of reproducing audio in public places technically improves—with smaller portable devices that let us intervene, create and modify entire soundscapes, shaping our perception of reality, emphasizing the immersion of the visitors, and creating memory through aural devices— the more the concept of monument transforms into memorial, and the future of collective *Urban Memory* will tilt from visual to acoustic. After the analysis of the results this slightly changed because sound is such an oscillating material. The initial difference presented by Beltrán turned out to be refutable primarily in terms of sound. As soon as the monu-memorials creators used sound, the categorical division from Beltrán begins to vanish. The samples revealed on the other hand, that the devices reduced their size in the course of time and that the interest to create immersive spaces increased.

The contrast with their surroundings makes the sound of monu-memorials stand out, but they rarely turn into *soundmarks*. The very few that fit into this classification reached it through mass media and Internet and over a long period of time.

Throughout the development of this research I found many more examples of acoustic monu-memorials than expected. The advancement of technical possibilities since the first recorded sounds have brought such an enormous sense of immersion and reality. This can be used in the future for immersive monu-memorials that can transport us back to the past in a way never experienced before: talking to Goethe on the Theaterplatz in Weimar for example. Immersive reality to “experience” the past more vividly.

The third main outcome is the proposal of a list of suggestions addressed to urban planners, architects, artists, designers and general public interested in the aspects involved when creating acoustic monu-memorials in public space, the *Urban Acoustic Commemoration Code*.

4.1 Urban Acoustic Commemoration Code

After this exploratory study and the identification of the aspects that are already used in the construction of acoustic monu-memorials I crossed the general characteristics that emerged in the upper categories with the specific singularities of the case studies. I present them here in an *urban acoustic commemoration code*, a list of the significant characteristics and different approaches used by the acoustic monu-memorials. This also describes how objects and sounds relate to each other to create an acoustic experience in public spaces and forms a series of suggestions in the creation and design of the "carriers" of memory and history in the planning of commemorative places giving shape to the acoustic image of the city.

1. Work in public spaces means work with non-artistic audiences
2. Not all passers-by are distracted listeners
3. Passers-by hear, make them listen
4. Noise is also desirable
5. 'Harmonic' sounds generally produce pleasure

6. Use the knowledge already existing to add another layer of meaning
7. Encourage social cohesion and citizen participation through the acoustic monu-
memorial
8. Acoustic stimuli influence the perception and emotional reactions of passers-by
9. Analyse the walking speed of your potential visitors
10. Sound helps to orientate people in the streets
11. Familiar sounds are soundmarks
12. Visual, acoustical, tactile co-design increases multisensory perception
13. You can give the listener the chance to hear sounds from places they have never
visited, physically and virtually
14. Offer the sense of a secure place
15. Think how many listeners are desirable at the same time in your monu-memorial
16. Design the monu-memorial platform for individual or groups, having in mind if
you want the spectators to be active or passive actors
17. Choose visible, invisible sound systems or both. These strategies create different
impacts in the way spectators receive your work
18. Distinguishing the sound source is desirable but not the sound device used
19. Buried loudspeakers may be the solution when playing audio in large places if
necessary
20. Avoid reproducing audio in the vertical axis

21. Consider modulating moments of silence and moments of loudness over time
22. Maintain a relationship with the surrounding sound
23. Equalize the sound to match the acoustics of the space due to the different materials that bounce or absorb the sound
24. Monitor and record the acoustic peculiarities of a place, measurements are necessary to optimize performance
25. Effects of vegetation in noise reduction are good for the city but not for your monu-memorial, probably the sound will be minimized by birdcalls (or may however interact with them).
26. Choose between monaural, binaural or multichannel outputs
27. Separate near and far sound field
28. Distant sounds are effective when foreground sounds are quiet
29. Live music usually has the power to overshadow everything else, even recorded music
30. Consider concise multilingual texts/poetry in the design of your acoustic monu-memorials. Different languages help to generate identity
31. People will know the monu-memorial by its short name. Select it wisely
32. You are dealing with expectations. In many cases media teaches how a sound sounds and is not always the same as the real sound

33. Memory is relative, so the sound will not always be noticed the same, as well as the experience will be different
34. Fusion of architecture, sculpture and audio generally need an interdisciplinary team of experts or their advice.
35. Acoustic monu-memorials are created in response to facts and sites. Keep in mind that monu-memorials change their meaning over time.

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Appendix

Appendix A – Complete list of the 110 examples received

Backgrouds	Example
Artist	Clinamen
Artist	Terrible Garden
Artist	Virtual Concert in the Holocaust Memorial Berlin
	Der Rufer
	Freiheitsglocke
	Das Geld, die Liebe, der Tod, die Freiheit - was zählt am Ende? [Money, Love, Death, Freedom- What matters in the end?]
	T4 - Memorial and Information Centre for the Victims of the Nazi Euthanasia Programme
	1914-2014 Eine Zeitreise/ Time travel through 100 years of German History
	Liberty Bell
	Asisi Panorama - The Wall
Artist	Time Piece Stommeln
	Hearing View Rheinau
	Wasserspuren
	Gutstrasse Galaxy
	Cassiopeia
	Bad Pyrmont Bombergalle
	Jüdisches Mahnmale, Berlin / Schöneberg composition
	Entfernte Züge [Distant Trains]

Appendix A

	Klanghaus für das Toggenburg
Artist	Monumento Jairo Varela
Artist	Children Bell Tower
	radio aporee ::: maps
	Sibelius Monument
	Le Chant des Sirènes
	Tallinn Song Festival
	Singing Ringing Tree
	Bench of whispers – Alameda Park
	Charles B. Stover Bench – The whispering bench
Artist	Scenario in construction
	Montjuïc Magic Fountain
Artist	Mahnmal Hören
	Licht über Weimar
	Jewish Mahnmal contains the notes of a Schöneberg Partiture
Artist	Cinco variaciones de circunstancias fónicas y una pausa
	Omphalomin
	No Places With Names
	Sonic Seascape Terrace
	Tactical Sound Garden
Artist	Estruendo
Artist	Museo Nacional de Colombia. Exhibition room dedicated to <i>el Bogotazo</i>
	Monument to the Lost Glove
	Incident at the Museum or Water Music
Artist	Voz Alta
Artist	Archivo Señal Memoria
	Archivo Biblioteca Nacional de Colombia

Appendix A

	Mapa Sonoro de Colombia
Artist	Radio Espectros
Artist	Babel
Artist	Voz Alta
Artist	Memory Loops
Artist	Monumento Jairo Varela
Artist	Alberiparlanti [Talking trees]
Artist	Voyager Golden Records
	Orlando Di Lasso monument / George Michael Memorial
	Yom HaShoah - the Jewish Holocaust Remembrance Day
	Monument's silence to remember Edward George Honey
	Schlaflos or sleepless
	Monument to the Memory of the Idea of Internationale
	Monumentos Sonoros
	Sad Songs of War Performance Manifesta 10, St Petersburg
	Memoryscape Thames
	Mayo Los Sonidos de la Plaza
	Weiss104 [white104]
	World Trade Center Recordings: Winds After Hurricane Floyd
	The Table of Silence
	Time Square Hum
	Banner of Peace monument
	Children's Memorial
	Vanished Sound Library
Sound Studies/Sound Artist	Landschaftsoper Ulrichsberg

Appendix A

Sound Studies/Sound Artist	Electrical Walk
Sound Studies/Sound Artist	Klangarchiv Neuendorf
Sound Studies/Sound Artist	el Elogio del Horizonte
	the work of Rolf Julius
	Tentative d'épuisement (sonore) d'un lieu parisien
Sound Studies/Sound Artist	Organ2/ASLSP
Sound Studies/Sound Artist	touched echo Dresden
Sound Studies/Sound Artist	Kenotaphion
	Oto Date
	Ground Zero
	Sounds of the World Trade Center
	The Sound Island
Sound Studies/Sound Artist	Estrépitós

Designer	Las Tv's
Designer	Concierto para Plantas
	The Singing Ship
	Morskeorgulje ("Sea Organ")
	Colossi of Memnon

Architect	Cathedral of St. Sophia, Novgorod, campanile
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Backgrounds	Example
Heritage Expert	Stasihaftanstalt
	Luftschutzerinnerungsstätte
Heritage Expert	Memorial Gusen
Heritage Expert	Warsaw Uprising museum
Heritage Expert	Eckturm in Libeskind's Berliner Jüdisches Museum
	Pavillon des Hörens

Appendix A

Heritage Expert	Passages
	Block 21, das italienische Mahnmal in Auschwitz
	Unfolding Spaces of My Memory: Female Migration through Audio
Art historian and/or curator	Poppy Field
Art historian and/or curator	Ugnayan
Art historian and/or curator	Scenario in Construction
Art historian and/or curator	Gedenkstücke
Social Anthropologist and/or Cultural Studies	Haus des Terrors
Social Anthropologists and/or Cultural Studies	das Holodomor-Denkmal in Kiew
	Ravensbrück Memorial
Social Anthropologists and/or Cultural Studies	Maqueta para el Dante
	CeloSie
	Olvido de Arena
	Santa Lucía, San Juan Bautista y Exvoto
	Testigo de las Ruinas / Witness to the Ruins
Historians	Roma und Sinti-Denkmal in Berlin
Social geographers	audio drift
Backgrounds	Example
Engineer	Valle de los Caídos
	Das Völkerschlachtdenkmal / The Monument to the Battle of the Nations
Librarian	Panorama MuseumThomas Müntzer

Appendix B

Appendix B – Detailed list of the intentions in the responses received.

Backgrounds	Example	Intentions
Artist	Clinamen	artistic exploration
Artist	Virtual Concert in the Holocaust Memorial Berlin	artistic exploration
Artist	Tallinn Song Festival	artistic exploration
Artist	Singing Ringing Tree	artistic exploration
Artist	Bench of whispers	artistic exploration
Artist	Montjuïc Magic Fountain	artistic exploration
Artist	No Places With Names	artistic exploration
Artist	Sonic Seascape Terrace	artistic exploration
Artist	Monument to the Lost Glove	artistic exploration
Artist	Alberiparlanti [Talking trees]	artistic exploration
Artist	Monument to the Memory of the Idea of Internationale	artistic exploration
Artist	World Trade Center Recordings: Winds After Hurricane Floyd	artistic exploration
Artist	Time Square Hum	artistic exploration
Artist	Vanished Sounds Library	artistic exploration
Sound Studies/Sound Artist	Landschaftsoper Ulrichsberg	artistic exploration
Sound Studies/Sound Artist	Electrical Walk	artistic exploration
Sound Studies/Sound Artist	Tentative d'épuisement (sonore) d'un lieu parisien	artistic exploration
Sound Studies/Sound Artist	Oto Date	artistic exploration
Designer	Las Tv's	artistic exploration
Designer	Concierto para Plantas	artistic exploration

Appendix B

Heritage Expert	Audiowalk Gusen	artistic exploration
Backgrounds	Example	Intentions
Artist	Terrible Garden	remember
Artist	T4 - Memorial and Information Centre for the Victims of the Nazi Euthanasia Programme	remember
Artist	Le Chant des Sirènes	remember
Artist	Estruendo	remember
Artist	Monument to the Lost Glove	remember
Artist	Radio Espectros	remember
Artist	Yom HaShoah - the Jewish Holocaust Remembrance Day	remember
Artist	Memoryscape Thames	remember
Artist	Mayo Los Sonidos de la Plaza	remember
Artist	World Trade Center Recordings: Winds After Hurricane Floyd	remember
Artist	Children's Memorial	remember
Sound Studies/Sound Artist	The Sound Island	remember
Heritage Expert	Block 21, das italienische Mahnmal in Auschwitz	remember
Heritage Expert	Audiowalk Gusen	remember
Art historian and/or curator	Gedenkstücke	remember

Appendix B

Social Anthropologist and/or Cultural Studies	das Holodomor-Denkmal in Kiew	remember
Social Anthropologist and/or Cultural Studies	CeloSie	remember
Social Anthropologist and/or Cultural Studies	Olvido de Arena	remember
Social Anthropologist and/or Cultural Studies	Testigo de las Ruinas / Witness to the Ruins	remember

Backgrounds	Example	Intentions
Artist	T4 - Memorial and Information Centre for the Victims of the Nazi Euthanasia Programme	education
Artist	1914-2014 Eine Zeitreise/ Time travel through 100 years of German History	education
Artist	Asisi Panorama - The Wall	education
Artist	Klanghaus für das Toggenburg	education
Artist	radio aporee ::: maps	education
Artist	Cinco variaciones de circunstancias fónicas y una pausa	education
Artist	Work of Teri Rueb	education
Artist	Museo Nacional Colombia	education
Artist	Voyager Golden Records	education
Artist	Schlaflos or sleepless	education
Artist	Monumentos Sonoros	education
Artist	Sad Songs of War	education
Artist	Vanished Sounds Library	education
Heritage Expert	Luftschutzerinnerungsstätte	education

Appendix B

Backgrounds	Example	Intentions
Artist	Children Bell Tower	homage
Artist	Sibelius Monument	homage
Artist	Charles B. Stover Bench – The whispering bench	homage
Artist	Monumento Jairo Varela	homage
Artist	Orlando Di Lasso monument / George Michael Memorial	homage
Artist	The Table of Silence	homage
Sound Studies/Sound Artist	Organ2/ASLSP	homage
Sound Studies/Sound Artist	ESTRÉPITOS	homage
Engineer	Valle de los Caídos	homage
Backgrounds	Example	Intentions
Artist	Liberty Bell	commemorate
Artist	Voz Alta	commemorate
Artist	Monument's silence to remember Edward George Honey	commemorate
Designer	The Singing Ship	commemorate
Social Anthropologist and/or Cultural Studies	Haus des Terrors	commemorate
Social Anthropologist and/or Cultural Studies	Ravensbrück Memorial	commemorate
Engineer	Das Völkerschlachtdenkmal / The Monument to the Battle of the Nations	commemorate
Librarian	Panorama Museum	commemorate

Appendix B

Thomas Müntzer		
Backgrounds	Example	Intentions
Artist	Monumento Jairo Varela	homage
Artist	Orlando Di Lasso monument / George Michael Memorial	homage
Artist	Children Bell Tower	homage
Artist	Sibelius Monument	homage
Artist	The Table of Silence	homage
Artist	Charles B. Stover Bench – The whispering bench	homage
Sound Studies/Sound Artist	Organ2/ASLSP	homage
Sound Studies/Sound Artist	ESTRÉPITOS	homage
Engineer	Valle de los Caídos	homage
Backgrounds	Example	Intentions
Artist	Der Rufer	give a voice
Artist	Freiheitsglocke	give a voice
Artist	Time Piece Stommeln	give a voice
Artist	Cassiopeia	give a voice
Artist	Babel	give a voice
Sound Studies/Sound Artist	ESTRÉPITOS	give a voice
Social Anthropologist and/or Cultural Studies	Maqueta para el Dante	give a voice
Backgrounds	Example	Intentions
Artist	Voz Alta	protest

Appendix B

Artist	Monument to the Memory of the Idea of Internationale	protest
Social Anthropologist and/or Cultural Studies	Testigo de las Ruinas / Witness to the Ruins	protest
Art historians and/or curator	Poppy Field	protest
Art historians and/or curator	Ugnayan	protest
Backgrounds	Example	Intentions
Artist	Das Geld, die Liebe, der Tod, die Freiheit - was zählt am Ende	reflect
Artist	Cinco variaciones de circunstancias fónicas y una pausa	reflect
Artist	Weiss ₁₀₄ (white ₁₀₄)	reflect
Artist	Banner of Peace monument	reflect
Designer	Morskeorgulje ("Sea Organ")	reflect

Appendix C – Detailed list of the non-selected responses

Artistic exploration	Example
	Clinamen by Celeste Boursier-Mougenot
	Virtual Concert in the Holocaust Memorial Berlin by Harald Weiss [Vor dem Verstummen]
	Singing Ringing Tree by Mike Tonkin and Anna Liu
	Wasserspuren by Andres Bosshard
	Gutstrasse Galaxy by Andres Bosshard
	Cassiopeia by Andres Bosshard
	Montjuïc Magic Fountainn by Carles Buigas
	Cinco variaciones de circunstancias fónicas y una pausa by Tania Candiani
	Omphalomin by Gun Holmström
	No Places With Names by Teri Rueb and Larry Phan with contributions from Carmelita Topaha (Dine)
	Sonic Seascape Terrace by Decoster-Taivalkoski, Haaslahti and Montes de Oca
	Tactical Sound Garden by Mark Shepard
	Monument to the Memory of the Idea of Internationale by Nemanja Cvijanović
	Time Square Hum by Max Neuhaus
	Landschaftsoper Ulrichsberg by Peter Ablinger
	Electrical Walk by Christina Kubisch
	Klangarchiv Neuendorf by Christian Helm
	the work of Rolf Julius
	Tentative d'épuisement (sonore) d'un lieuparisien by Eric de la Casa
	Oto Date by Akio Suzuki
	The Singing Ship by Peggy Westmoreland

	Morskeorgulje ("Sea Organ") by Nikola Bašić
/not in public space /	
	Incident at the Museum or Water Music by Ilya Kabakov and Vladimir Tarasov
	Babel by Cildo Meireles
	Alberiparlanti [Talking trees] by Luca María Patella
	Concierto para Plantas by Ariel Guzik
	Poppy Field by Sanja Ivekovic
	CeloSie by Beatriz Eugenia Díaz
	Olvido de Arena by Mario Opazo
	Santa Lucía, San Juan Bautista y Exvoto by José Alejandro Restrepo
	Testigo de las Ruinas / Witness to the Ruins by Heidi and Rolf Abderhalden
/no direct sound/	
	Bad Pyrmont Bombergalle
	Bench of whispers - Alameda Park
	Charles B. Stover Bench – The whispering bench
	el Elogio del Horizonte by Eduardo Chillida
	Colossi of Memnon
	Valle de los Caídos
	Das Völkerschlachtdenkmal / The Monument to the Battle of the Nations
Archives	Example
	radio aporee ::: maps
	Archivo Señal Memoria
	Archivo Biblioteca Nacional de Colombia

Mapa Sonoro de Colombia
Vanished Sounds Library

Museums	Example
	Asisi Panorama - The Wall, Berlin
	Museo Nacional de Colombia. Exhibition room dedicated to <i>el Bogotazo</i>
	Children's Memorial at Yad Vashem Holocaust History Museum
	Cathedral of St. Sophia, Novgorod, campanile
	Stasihaftanstalt
	Luftschutzerinnerungsstätte
	Warsaw Uprising museum
	Pavillon des Hörens
	Block 21, das italienische Mahnmal in Auschwitz
	Music's Luigi Nono: Ricorda cosa ti hanno fatto in Auschwitz
	Haus des Terrors
	das Holodomor-Denkmal in Kiew
	Panorama Museum Thomas Müntzer

	Example
Rehearsals, recordings, courses, research and experiments	Klanghaus für das Toggenburg
events	Tallinn Song Festival
Souvenirs	Las Tv's
Experimental environmental sound work	audio drift

Appendix D - Video documentation & information

Table 5 Acoustic Direct Monu-memorials – Passive approach – Video doc	
Permanent	
Denkmal für die im Nationalsozialismus ermordeten Sinti und Roma Europas (section 3.2.1.1.1)	Isaev, Ognyan. <i>Memorial to the Sinti and Roma Victims of National.</i> 2014. YouTube, https://www.youtube.com/watch?v=IgyeenqYiug . Lee, Henry. “ <i>Memorial to Murdered Sinti and Roma, Berlin.</i> ” Vimeo, 2015, https://vimeo.com/138029941 .
Women of Ravensbrück - Ravensbrück Memorial (section 3.2.1.1.2)	Stewart, Graeme M. <i>Ravensbruck Memorial by Night.</i> 2012. YouTube, https://www.youtube.com/watch?v=aqiH9J3SMQM . ---. <i>Ravensbruck Memorial, Museumplein, Amsterdam.</i> 2012. YouTube, https://www.youtube.com/watch?v=UOq7eytjzCo .
Escenario en Construcción (Scenario in Construction) (section 3.2.1.1.3)	Periódico Arteria. <i>Videoclip Arteria: “Escenario en Construcción.”</i> 2018. YouTube, https://www.youtube.com/watch?v=SHPvKdsH1GY . Vistazos Críticos. <i>Scenario In Construction de Oswaldo Maciá.</i> 2018. YouTube, https://www.youtube.com/watch?v=BVwbM25SXoA .
Passages (section 3.2.1.1.4)	290asuka. <i>Passages/Homage to Walter Benjamin.</i> 2009. YouTube, https://www.youtube.com/watch?v=iJKFGpkN934 . Anies, Thomas. <i>Dani Karavan, Passages, Homage to Walter Benjamin, 1990-1994.</i> 2016. YouTube, https://www.youtube.com/watch?v=qJHQDZsj46s . Heisterkamp, Jens. <i>Walter Benjamin Memorial Port Bou.</i> 2014. YouTube, https://www.youtube.com/watch?v=mtVJAcghe4M .
The Sibelius Monument (section 3.2.1.1.5)	Takis Travel. <i>Sibelius Monument, Helsinki - Finland.</i> 2015. YouTube, https://www.youtube.com/watch?v=yPo4Qcvx6u4 .

	<p>toande77. <i>The Sibelius Monument in Helsinki</i>. 2012. YouTube, https://www.youtube.com/watch?v=NkwLNA1xtcI.</p> <p>Wood, David. <i>6309 Sibelius Monument Helsinki P1040462</i>. 2013. YouTube, https://www.youtube.com/watch?v=3UVNyUMPtEo.</p>
<p>Children's Bell</p> <p>(section 3.2.1.1.6)</p>	<p>Klinger, Porter Allison. <i>Children's Bell Tower</i>. 2010. YouTube, https://www.youtube.com/watch?v=2pIUf2pozaM.</p> <p>ThePressDemocrat. <i>Children's Bell Tower in Bodega Bay</i>. 2016. YouTube, https://www.youtube.com/watch?v=NZjxl1xk3Tg.</p>
<p>Freiheitsglocke, Rathaus Schöneberg</p> <p>(section 3.2.1.1.7)</p>	<p>Gwendolinaorg. <i>Geläut der Freiheitsglocke Berlin Schöneberg</i>. 2015. YouTube, https://www.youtube.com/watch?v=3gFIiwXvikM.</p> <p>Kaiserkanzlei. <i>Freiheitsglocke - Rathaus Schöneberg - Berlin</i>. 2008. YouTube, https://www.youtube.com/watch?v=49PXzzYh3PM.</p>
<p>1914-2014 Eine Zeitreise</p> <p>(section 3.2.1.1.8)</p>	<p>Wandering Oderites. <i>Berlin 2016. 1914-2014 Eine Zeitreise/ Time Travel through 100 Years of German History</i>. 2017. YouTube, https://www.youtube.com/watch?v=fpXhEsos7Ho.</p> <p>Cohen Zvi Peretz. <i>Eine Zeitreise durch hundert Jahre deutsche Geschichte</i>. 2017. YouTube, https://www.youtube.com/watch?v=OqUVsWAHji4.</p>
<p>Organ2/ASLSP [As Slow as Possible]</p> <p>(section 3.2.1.1.9)</p>	<p>Garzanti, Michele. <i>John Cage Organ Project in Halberstadt ORGAN2/ASLSP</i>. 2016. YouTube, https://www.youtube.com/watch?v=SVPHOD3hN84.</p> <p>Glockengiesser. <i>John Cage -- Organ2 / ASLSP</i>. 2012. YouTube, https://www.youtube.com/watch?v=5VOCBRhhVr4.</p>
<p>Terrible Garden</p> <p>(section 3.2.1.1.10)</p>	<p>Müller-Gerbes, Heidi. "Wiesbaden Kein „Terrible Garden“ für Wiesbaden." <i>Frankfurter Allgemeine Zeitung</i>, 16 Apr. 2008. FAZ.NET, http://www.faz.net/aktuell/rhein-main/region/wiesbaden-kein-terrible-garden-fuer-wiesbaden-1545725.html.</p>

Temporal	
Mayo Los sonidos de la Plaza [1945-2001] (section 3.2.1.2.1)	Liut, Martín. <i>Mayo, los sonidos de La Plaza</i> . 2013. Vimeo, https://vimeo.com/80831180 .
Entfernte Züge (Distant Trains) (section 3.2.1.2.2)	Gérard, Chloé. <i>Bill Fontana - Distant Trains</i> . 2017. YouTube, https://www.youtube.com/watch?v=wsxirvfWSZo . Lisbonconsortium. “Acoustical Visions” by Bill Fontana. 2017. YouTube, https://www.youtube.com/watch?v=pfrtAyRMhuo .
Sound Island (section 3.2.1.2.3)	Fontana, Bill. <i>Sound Island</i> , Paris 1994. 2017. Vimeo, https://vimeo.com/241557694 . Tremontarama. <i>Bill Fontana’s Sound Island at the Arc De Triomphe</i> . 7/4/94. 2009. YouTube, https://www.youtube.com/watch?v=a7puDFfyrIo .
Nachklang (section 3.2.1.2.4)	Schulz, Bernd. “Sounds over Weimar.” <i>Robin Minard Nachklang</i> , edited by Ulrich Krempel, Hatje Cantz Verlag, 1999, pp. 15–21, http://www.hatjecantz.de/robin-minard-3180-o.html . Minard, Robin. <i>Robin Minard - Installationen Kompositionen Publikationen</i> . http://robinminard.com/minard.content.php?id=31&sh=o . Accessed 31 May 2018.
Estruendo and Estrépitos (section 3.2.1.2.5)	“En los tiempos del ruido.” <i>Agencia de noticias</i> , 2014, http://agenciadenoticias.unal.edu.co/detalle/articulo/en-los-tiempos-del-ruido.html . Bejarano, Mauricio. <i>Estruendos</i> . 2012, http://www.mauricio-bejarano.com/plasticasonora_htmls/plasticasonora_estruendo.html . El Telégrafo. “Mauricio Bejarano: la vocación de un coleccionista de sonidos.” <i>El Telégrafo</i> , 12 Sept. 2013, https://www.eltelegrafo.com.ec/noticias/cultura/7/mauricio-bejarano-la-vocacion-de-un-coleccionista-de-sonidos .

Maqueta para el Dante (section 3.2.1.2.6)	Andes, Arte Universidad de los. “ <i>Maqueta Para El Dante</i> ” <i>Intervención de José Alejandro Restrepo en el Monumento de Los Héroes</i> . 2014. Vimeo, https://vimeo.com/95186393 . Cardenas, Luna. <i>Maqueta para el Dante</i> . 2014. YouTube, https://www.youtube.com/watch?v=UTtnPfs3NUk .
Time Piece Stommeln (section 3.2.1.2.7)	Hannappel, Werner. <i>Time Piece Stommeln - a Film by Werner Hannappel - Stommeln, 2007</i> . 2009, http://www.max-neuhaus.info/Neuhaus-Stommeln.html .
Sad Songs of War (section 3.2.1.2.8)	Manifesta Foundation. <i>Manifesta 10. Public Program. Deimantas Narkevicius “Sad Songs of War.”</i> 2014. YouTube, https://www.youtube.com/watch?v=RQvtogOwZiA .
Radio Espectros (section 3.2.1.2.9)	En Órbita. <i>Reminiscencias sonoras de Colombia</i> . 2013. YouTube, https://www.youtube.com/watch?v=Sold4HJLP1Y .

Table 6 Acoustic Direct Monu-memorials – Active approach-Video doc	
Permanent	
<i>Niche Monument to Jairo Valera</i> (section 3.2.2.1.1)	Marín, Luz Marina. <i>Plazoleta de Jairo Varela</i> . 2017. YouTube, https://www.youtube.com/watch?v=Meog2peA7kl . Pantoja Arquitectos. <i>Monumento Jairo Varela : Niche</i> . 2016. YouTube, https://www.youtube.com/watch?v=xa1oKrSFLjQ . Videonotas Caleñas, and José Luis Rodríguez. <i>Inauguración Oficial de Escultura Homenaje a Jairo Varela</i> . 2015. YouTube, https://www.youtube.com/watch?v=qsICO-txfFA .
Hearing View Rheinau (section 3.2.2.1.2)	Sserpdrow. <i>Hearing View Rheinau [2013]</i> . http://bueroauinger.de/hearing-view-rheinau/ . Accessed 30 May 2018.
Temporal	
Voz Alta (Loud Voice)	Rafael Lozano-Hemmer - Project “Voz Alta.” 2008, http://www.lozano-hemmer.com/voz_alta.php .

Appendix D

(section 3.2.2.2.1)	Mutek. <i>Voz Alta by Rafael Lozano-Hemmer</i> . 2010. Vimeo, https://vimeo.com/17292454 .
Ugnayan (section 3.2.2.2.2)	Asia Art Archive. <i>Inti Guerrero: Udlot-udlot</i> . 2016, https://aaa.org.hk/en/resources/videos/inti-guerrero-udlotudlot

Table 7 Acoustic Indirect Monu-memorials-Video doc	
Permanent	
Double Memorial - Michael Jackson & Orlande de Lassus or Roland de Lattre (section 3.2.3.1.1)	DJMunich. <i>Michael Jackson Memorial in Munich, Germany @ Promenadeplatz</i> . 2009. YouTube, https://www.youtube.com/watch?v=vmTQlFRZpbo . Kameramann35. <i>Michael Jackson Memorial Tribute Munich 2011</i> . 2011. YouTube, https://www.youtube.com/watch?v=vJWoLjUerb8 . TheMichaelJacksonBlogDE. <i>Vlog : Am Michael Jackson - Denkmal in München</i> . 2016. YouTube, https://www.youtube.com/watch?v=pQ7EiMYPfyo .
Monument's silence to remember. Edward George Honey (section 3.2.3.1.2)	<i>Edward George Honey Monument Australia</i> . 2011, https://monumentaaustralia.org.au/themes/people/arts/display/32311-edward-george-honey . "Edward George Honey Memorial." <i>City Collection</i> , 9 May 2018, http://citycollection.melbourne.vic.gov.au/edward-george-honey-memorial/ .
Liberty Bell, Independence Hall Philadelphia (section 3.2.3.1.3)	Gretzky Dog and Friends. <i>Visiting the Liberty Bell Center in Philadelphia, Pennsylvania</i> . 2016. YouTube, https://www.youtube.com/watch?v=wdMAQmnUwhU . Mitchel, Christopher, and Freida Thibodeau. <i>Independence Hall and Liberty Bell</i> . 2013. YouTube, https://www.youtube.com/watch?v=N9zrTialiAc .
Der Rufer (section 3.2.3.1.4)	"Der Rufer" (<i>The Crier</i>). 26 May 2016, https://www.berlin.de/mauer/en/sites/memorials/der-rufer-the-crier-479179.en.php .

	<p><i>Rue du 17 juin et statue “der Rufer” à Berlin.</i> https://www.cityzeum.com/rue-du-17-juin-et-statue-der-rufer. Accessed 30 May 2018.</p> <p>Tiergarten Berlin. <i>Der Rufer</i>. 2015. YouTube, https://www.youtube.com/watch?v=igtTdGrsyQI.</p>
The Table of Silence (section 3.2.3.1.5)	<p>Culture - Audio Books - LivresAudio. <i>Targu Jiu City Break</i>. 2015. YouTube, https://www.youtube.com/watch?v=SkT_XgUmkPo.</p> <p>Mustaine. <i>Targu Jiu - A Tribute to Constantin Brancusi</i>. Vimeo, 2012, https://vimeo.com/45007370.</p>
Jewish Mahnmal in Buchenwald (section 3.2.3.1.6)	<p><i>Commemorative Sites - Buchenwald Memorial.</i> https://www.buchenwald.de/en/118/. Accessed 31 May 2018.</p> <p>“Jüdisches Mahnmal · Klaus Schlosser Architekten.” <i>Klaus Schlosser</i> 15 June 2016, http://www.klausschlosserarchitekten.com/juedisches-mahnmal-buchenwald/.</p> <p>Steen, Tine. “Tine Steen Installationen Buchenwald.” Tine Steen, http://www.tinesteen.net. Accessed 30 May 2018.</p>
Temporal	
Schlaflos [Sleepless] (section 3.2.3.2.1)	<p>Hager, Katrin. “Als die Stimme aus dem Ofen verstummte.” http://www.merkur-online.de, http://www.merkur-online.de/lokales/region-holzkirchen/valley/stimme-ofen-verstummt-zwei-3297291.html. Accessed 11 Feb. 2015.</p> <p>Merkur-Online.de. “Gemeinde verzichtet auf den Schlaflosen.” http://www.merkur-online.de, 2009, http://www.merkur-online.de/lokales/miesbach/landkreis/gemeinde-verzichtet-schlaflosen-31492.html.</p> <p>---. “Schlafloser geht in Ruhestand.” http://www.merkur-online.de, 2009, http://www.merkur-online.de/lokales/miesbach/landkreis/schlafloser-geht-ruhestand-571221.html.</p>

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Permanent	
Das Geld, die Liebe, der Tod, die Freiheit - was zählt am Ende? (section 3.2.4.1.1)	imai. "Das Geld, die Liebe, der Tod, die Freiheit, was zählt am Ende? Gerz, Jochen." <i>inter media art institute imai</i> , 2000, http://www.stiftung-imai.de/b_katalog/archiv?a_id=1544 . I.V.S. GmbH - Gesellschaft für Informations-Verarbeitung und Software-Service mbh. "Jochen Gerz BMF Berlin." <i>ivs-bremen</i> , http://www.ivs-bremen.de/jochen_gerz_bmf_berlin.html . Accessed 1 June 2018. Gerz, Jochen. Jochen Gerz - Das Geld, Die Liebe, Der Tod. http://www.gerz.fr/html/main.html?res_id=5a9df42460494a34beea361e835953d8&art_id=91d2e4fb380d7359424bb8786676a75d . Accessed 16 Jan. 2014
T4 - Memorial and Information Centre for the Victims of the Nazi Euthanasia Programme (section 3.2.4.1.2)	Stiftung Denkmal. <i>Gedenk- und Informationsort für die Opfer der Nationalsozialistischen »Euthanasie«-Morde</i> . https://www.t4-denkmal.de/ . Accessed 1 June 2018. <i>T4 Memorial and Information Point Grün Berlin</i> . https://gruen-berlin.de/en/projekt/t4-memorial-and-information-point . Accessed 1 June 2018 Foundation Memorial to the Murdered Jews of Europe. <i>Stiftung Denkmal Für Die Ermordeten Juden Europas: Memorial and Information Point for the Victims of National Socialist »Euthanasia« Killings</i> . https://www.stiftung-denkmal.de/en/memorials/memorial-and-information-point-for-the-victims-of-national-socialist-euthanasia-killings.html . Accessed 1 June 2018.
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(section 3.2.4.1.3)	<i>Schalechet – Gefallenes Laub</i> Jüdisches Museum Berlin. https://www.jmberlin.de/schalechet-gefallenes-laub . Accessed 1 June 2018.
Yom HaShoah - the Jewish Holocaust Remembrance Day (section 3.2.4.1.4)	Fisher, Max. "This Powerful Video Shows Israel Coming to a Total Stop for Holocaust Remembrance Day." <i>Vox</i> , 15 Apr. 2015, https://www.vox.com/2015/4/15/8420413/israel-yom-hashoah-holocaust . Jewlicious. <i>Holocaust Memorial Day / Yom Hashoah in Jerusalem, Israel 2011</i> . 2018. YouTube, https://www.youtube.com/watch?v=IfwQhmRhrqM
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* on digital media	
Kenotaphion (section 3.2.4.2.1)	Forced Exposure. <i>Jonty Semper: Kenotaphion - 2CD - Locus +/Charm - Forced Exposure</i> . https://www.forcedexposure.com/Catalog/semper-jonty-kenotaphion-2cd/KEN.01CD.html . Accessed 1 June 2018 Kennedy, Maev, et al. "CD Art and the Sound of Silence." <i>The Guardian</i> , 9 Nov. 2001. www.theguardian.com , http://www.theguardian.com/uk/2001/nov/09/maevkenedy
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<p>Weiss104 (white 104)</p> <p>(section 3.2.4.3.4)</p>	<p>Fusco, Filomeno. <i>Weiss104 (White 104) a Temporary National Monument</i>. http://filomenofusco.de/english/works-und-projects/weiss104/. Accessed 2 June 2018.</p> <p>Kégli, Victor. <i>Weiss 104</i>. http://www.victorkegli.com/en/weiss-104. Accessed 2 June 2018.</p>

Appendix E - Text inside of Niche's Bell Monument

The text does not have punctuation because in that way were conceived for the design of the monument.

Δ BELL 1/ CAMPANA 1

Text in the bell where the percussion – rhythmic section can be heard.
Bold texts were printed on reflective paper.

La mujer cuando es bonita compadre baila de la'o pasa el tiempo una arruguita la ven bailando apreta'o mi mamá me ha dicho que no me case con hombre rico porque todas las noches la pasa en brinco mi mamá me ha dicho que no me case con hombre pobre porque todas las noches llore que llore que importa si fue primero ella es mi vida y así la quiero vuelve y no pongas en duda toda la razón que le da vida al corazón cuando hay amor¡ay! sácame la lengua pero a punta'e mordisquitos porque como Pedro **por su casa aquel hombre se paseó con la risa te engañó se robó tu corazón** queda un camino de piedra y filo y la revancha que da el destino luz de esperanza corre y alcanza justicia arriba está la balanza te pintó pajaritos en el aire como en los cuentos de hada todo quedó en nada tu risa es el señuelo de una pérfida pasión cobraste cada beso pagaste con traición al corazón no se amarra al corazón no se le asegura no se le pone guardaespaldas déjala que siga déjala que siga si estuviera contigo en tus brazos si a la esquina conmigo a pasar un buen rato ese día que tú te olvidaste de mí ese día que yo ¡ay! me olvidé de ti faltó un pañuelo para secar tus lágrimas faltó un amigo que me consolara **aquella noche que tu andabas con él mi corazón estaba contigo** dile a Macorina que se traiga un güiro que esta rumba no no se está acabando muchos bares y cantinas te toca recorrer muchos años en la esquina hoy tienes que comprender que cuando pasan pesan salen canas y la piel ya no es mágica alfombra pues el tiempo vio correr voy a llevarte a Nueva York dicen los muchachos que allá sí se baila mejor y **mi Cali se pone en feria cuando toca Niche es tremenda histeria** en todo el barrio en todo Queens la gente se está quejando que traigan a Raphy Mercado que a los bomberos vive llamando que traigan a Raphy Mercado que al 911 vive marcando será que en todo Nueva York no hay una gota de... para calmar las ganas que... de Manhattan hasta el Bronx si no se arregla el baile se le daña el baile se le daña siempre como la araña por eso contigo nadie se amaña que en este mundo hay malas y buenas y que ser bueno es como una condena por eso mi vida está llena de penas la suerte la forjo pues nunca la espero angustias quimeras serán pasajeras porque definido voy por mi camino con rumbo norte busco mi destino yo que tanto la quería y por otro me dejó yo que tanto la quería y por otro me dejó y yo que todos los días le daba ají con pacó le voy a dar pa' que aprenda a respetar que conmigo no se juega y la vuelvo a castigar yo la vuelvo a rematar esa negra es masoquista le vuelvo a dar, le vuelvo a dar pa' que no se venga a igualar es que

conmigo no se juega con la punta con el medio con el palo con el palo entero pero
 esto no se queda así aunque más tarde me espere una condena mi hogar está
 destruido por un hombre corrompido el honor de mi casa corroído dígame usted
 señor juez mi venganza tiene sentido en una bola de cristal yo quise ver cómo fue ayer
 le juro que no quise estar ¡ay! yo no pude contener cuando el látigo implacable lo dejó
 sin piel así comenzó y calló la verdad a nadie reveló con sangre y con sudor su historia
 escribió cielo de tambores cielo de tambores cielo... cielo que mi raza llena de colores
 le tengo miedo al mar pero navego temo a la oscuridad pero soporto ante la soledad
 yo me acongojo y como todo ser que vive río y lloro de romántica luna el lucero que es
 lelo de mirar en tu valle la mujer que yo quiero y el jilguero que canta calles que se
 levantan carnaval en Juanchito todo un pueblo que inspira es por eso que espero que
 los días que lejos no dure mi ausencia sabes bien que me muero todos los caminos
 conducen a ti si supieras la pena que un día sentí cuando al frente de mí tus montañas
 no vi que todo el mundo te cante que todo el mundo te mime celoso estoy pa' que
 mires no me voy más ni por miles qué noches qué noches tan bonitas Siloé en sus
 callecitas al fondo mi valle en risa ¡ay! todito se divisa **Barranquilla puerta de oro**
París la ciudad luz Nueva York capital del mundo del cielo Cali la sucursal oiga
 señor baje un poco la presión que muere del corazón y pa' eso ya no hay medicina es
 una chica máster más terca pero así la conocí y así me gusta a mí me quitaré la
 máscara te juro que no pisaré otra cáscara traeme pues la policía no han visto un
 hombre bravo eso decía mi tía el tiempo no le hizo mella sigue bonita y más bella este
 amor que ayer nació sin principio ni final aferrado en la tormenta que no quiere
 terminar tú buscando la salida yo lo mismo por igual así atados a un destino que lo
 nuestro ve normal te prometo que yo no paso más por tu lado no más daño te
 prometo que tus besos y caricias nunca... nunca más recordaré clínicamente
 declarado muerto este amor sentimentalmente opuesto no quiero fotografías que sólo
 suman kilómetros qué poquita cosa dejaste de ti se siente el vacío son cuatro paredes
 conmigo y un llanto sin testigo entre más pasan las horas aciagas más me toco la lliga
 y el frío se estaciona en el alma al saber que ya no queda nada el amor es como un ave
 vuela cuando tiene bríos sino come en el camino el abismo es su destino y el mismo
 sitio imaginado que en la mente hayamos dime una mentira pero piadosa dime que
 eres lluvia de flores y rosas dime que el rocío no te puso hermosa que fueron mis
 besos y no otra cosa para que sirven trapos que nos quitan tiempo y ganas y un nido es
 nuestra cama si estamos lejos nos reclama si en la calle una cintura te vuelve loco al
 pasar es la seña que te hace para dejarse alcanzar aprieta Buenaventura tú eres mi
 sueño eres dulzura aprieta Buenaventura que tú eres mi brisa pura apágame la vela
 que dicen que la luna salió grande y bella melaza pura tenía que ser mi negra de
 Buenaventura orgullosa... orgullosa como yo luciendo su piel oscura mi negrura de la
 cintura para abajo aprieta tú sabes lo que tienes sabes cómo es tú sabes que te sobra
 fuego precisamente en la parte que es qué es lo que tiene esa negra... qué tiene... qué
 tiene... qué tiene disque fuego en la cintura eso es lo que hace que se me suba... suba
 la temperatura y que un can andan planeando nos vienen engatusando negro con
 negro peleando sin tierra no' están dejando encomiéndose al santo de Raspadura que
 conmigo la tiene dura yo vengo de Suroco donde hace tiempo no se lava con manduco

usted no ha visto un hombre bravo como yo no no qué va no no qué va eso lo aseguro más que el que toco con el dedo le dejo... le dejo la hinchazón y como lo dijo Ismael también lo dejo bembón tengo mi santo y mi Babalao por eso es que ando vacila'o sabe lo que tiene lo que le conviene tiene sabrosura de los pies a la cintura porque ella es niche niche como yo y me siento orgulloso en la tribuna en la calle donde sea cuando me visto de rojo saco pecho y fuerza en mi garganta la humildad la dejo en casa señores soy escarlata y algo me dice que mañana no trabajo que esta yo no la rebajo soy de casta americano papá mamá llévenme al estadio papá mamá vístanme de rojo papá mamá no sean egoístas papá mamá que yo los quiero ver ganar papá mamá llévenme al estadio papá mamá vístanme de rojo papá mamá que mi equipo va a jugar papá mamá yo americano soy

Δ BELL 2 /CAMPANA 2

Text in the bell where the harmonic section can be heard.

la experiencia hace al maestro y la calle al desenvuelto las palabras son recuento lo demás es puro cuento cuando te diga mamita linda negra santa que me voy quién lleva la plata a casa quién dará para el arroz quién dará pa' la comi'a de tu perro y el ratón no me digas que no puedes cambiar tu forma de ser yo era un tigre y ya ves que ni manchas quedaron recapacité no me traigan flores que si no muero hoy yo no muero mañana aunque la vida es corta yo no me voy ahora mi mamá me ha dicho que no me case con hombre gordo porque todas las noches me rompe el toldo mi mamá me ha dicho que no me case con hombre flaca porque todas las noches fuma tabaco como si la noche durara un poco más en vez de amanecer como si la lluvia cayera sin presagio cuando hay sol no sé decir te quiero pero me entrego busca por dentro amor y llega como yo al total convencimiento escampa tus dudas en mis adentros que de ternura estoy hecho por dentro no lloro sólo por llorar diera la vida entera por reír por qué vuelves a meterte en mi pensamiento a acabar con la poca fe que me queda para vivir es que tú no sabes para qué sirven los sentimientos de otra persona tú no sabes eso pa' qué sirve eso tú no sabes querer cuando el tiempo con su manto blanco nos pinte el cabello y se acabe lo bello y los años que no admiten engaños nos dejen sin piel hagamos lo que diga el corazón verás cómo se nos cambia la vida qué cosas bonitas que con los ojos no vemos y que por dentro llevamos pero no lo sabemos qué cosas bonitas más bonitas más bonitas porque entran al alma sin tocar sin tocar la puerta qué cosas bonitas más bonitas me llegan al corazón y no salen por ninguna razón cuando la miran bailando es el centro de atención ninguna lo hace mejor... mejor se quedan mirando porque ella es niche niche como yo esa negra baila con aguaje y de la'o porque tiene caché porque tiene tumbao por eso siempre la he mira'o y me trae mirando vira'o tiene su mela'o y todas la han envidia'o baila salsa y currulao a golpe de marea cerra'o suavcito y tranca'o y yo ando sabroso con mi Babalao sabe qué es lo que es y cómo es con Niche la traigo bailando pega'o sabe lo que tiene lo que le conviene tiene sabrosura de los pies a la cintura porque ella es niche niche como yo

tengo que hacer lo del cimarrón cuando buscó su liberación cuando sintió el yugo opresor monte adentro se volvió un león defender un país con mis principios con mis ideales defender una tierra no sé si ajena valga la pena que aprendí a querer porqué terminar como yo entre cadenas y un canto de amor acaba en llanto en tanto tanto llanto aprender a vivir entre el odio xenófobo grosero eso dio pie para sacar pecho de mi origen pueblera de qué valió poner en alto en lo más alto mi bandera altanera si el premio que recibo sin motivo es una larga condena de qué valió me pregunto yo mi bandera y mi emblema si yo soy parte de la solución no del problema la luna ya se cansó en el verano buscar la orilla como consuelo le queda sólo posarse en la choza mía pareces enamorada pero tú ni chicha ni limonada;ay! sácame la lengua pero a punta'e mordisquitos esto sí es mango viche con salsa la cárcel es un cementerio de hombres vivos que el que peca y reza empata por un cigarro alguien te mata y mi perro que aunque borracho llegue es el único que siempre alegre está yo soy rico en sentimiento y corazón por eso para ti no va mi invitación que haga juego la chapa con mi llave que nadie aprenda la clave yo no soy celoso que va yo me voy al credo y no ma' buscaré la forma de hacerte regresar todo en su puesto como estaba sin pasar aduana sin pagar un nuevo impuesto desde que nací me estoy muriendo gracias al amor sigo viviendo un beso tuyo cura más que la penicilina ya ni me miras y siendo el mismo me das la espalda como castigas por dentro lloras sé que me adoras y no perdonas por dios razona y es que duele más y mucho más y duele más y mucho más y duele más y un poco más cuando se ha vivido si ya no hay risa sólo el llanto que avisa que somos dos más que caminan sin rumbo sin lugar a donde ir no existe la idea la más mínima idea de lo que es el amor gotas de lluvia no es el rocío lágrimas que brotan porque ya no hay amor quisiera saber saber porque se escapó de mis brazos toda la felicidad a toda máquina corriendo voló no dejó huellas se desapareció verano azul que me calentó otoño gris que con el frío llegó en mi cuarto solo frente al nochero un pensamiento en la oscuridad la tristeza que se mete en mi cuerpo porque sucede siempre cuando tú no estás yo tengo la llave de tu corazón si voy a buscarte no le cambies el seguro a la chapa y escapé sin darme cuenta donde huía culebras éramos que al nacer entre ellas se mordían con el veneno el amor de una vez palidecía y una historia más entre dos así moría y aunque prometas el cielo y la tierra te lo repito que contigo ya no pasa na'a los dos hemos perdido el cielo y una sonrisa que sepan en Puerto Rico que es la tierra del jibarito a Nueva York hoy mi canto perdonen que no les dedico a Panamá Venezuela a todos todos hermanitos el Grupo Niche disculpas pide pues no es nuestra culpa que en la costa del pacífico hay un pueblo que lo llevamos y en el alma se nos pegaron y con otro no comparamos allá hay cariño ternura ambiente de sabrosura los cueros van en la sangre del pequeño hasta el más grande negritos como nosotros de alegría siempre en el rostro a ti mi Buenaventura con amor te lo dedicamos si voy del firme a La Playita camino dos pasos donde el negro solo solito se liberó rienda suelta al sabor y al tambor le dio ancho y caudaloso pasas lento en tu viaje retratas el dolor que injusto llevas poco a poco hasta el mar y pensar que todo quieres como yo y cambiarlo todo quieres sé también del puente para allá Juanchito del puente para acá esta Cali y en el medio de los dos pasa el Cauca pasa el Cauca buscando al Magdalena palo no va a servir Le r'oy y le r'oy y volteo a ver

y esa culebra sigue ahí como si nar'a ¡ay! qué tiene la culebra qué tiene qué tiene esto a mí ya me está sabiendo a cacho me sigue desde que éramos muchachos Ameriquito Ameriquito dame una mano que nosotros nos conocimos chiquitos paraco tira bala guerrillo tira bala el indio tira bala mi gente tira bala y mi machete ya no roza en el monte yo le dije a Sofonía cogé tu muj'é y tu cría que se piel'da lo que se piel'da que yo corro con la mía pareces enamorada pero tú ni chicha ni limonada ¡ay! sácame la lengua pero a punta'e mordisquitos esto sí es mango viche con salsa la cárcel es un cementerio de hombres vivos que el que peca y reza empata por un cigarro alguien te mata y mi perro que aunque borracho llegue es el único que siempre alegre está yo no me amoldo a la moda ni novio ni amante ni boda yo propongo que en cada esquina tiquiriquitón tintón los dos un vacilón no hay estación de bomberos por mi casa que apague este fuego que por dentro quema que me desespera traeme... traeme pues la policía que yo me vuelvo respondón el hijo que a la fuerza trajo al mundo creció en el barrio viendo la droga y el alcohol

Δ BELL 3 / CAMPANA 3

Selected text where the melodic section can be heard, but in the final design it was not implemented.

porque ahora se me dio cuenta que le hacen falta sus cuentas el mundo da tantas vueltas y usted anduvo solo en revueltas pague gusto pague bueno que allá le dan las devueltas de un momento a otro sin saber ya se me notan los años no tiene sentido vivir así la vida con una mano adelante con la otra mano atrás tapando el hueco tapando el hueco ayer que tú que yo la cosa queriendo más tarde sin un porqué peleando con la mano izquierda dando con la derecha mamita castigando aprende tú de mí hasta la manera de mirar que de mi padre yo aprendí hasta la forma de caminar cómo darte el gusto de reír si me quieres herir no hagas... no hagas llagas mis heridas toma... toma y dame que eso es vida dame... dame un poco de cariño mira preciso el anillo y las llaves del castillo no fue una mujer la que engañaste fue la niña de la casa que enredaste yo te enseñaré a olvidar te enseñaré a decir te quiero y te sabré esperar aunque te encuentres lejos y como cedro que aguanta el sol de enero ahí estaré mi amor con mi canción primero una aventura es más bonita si no miramos el tiempo en el reloj una aventura es más bonita si existe dueño para cada uno de los dos qué bello es quererse así y no saber si habrá segunda vez y en un segundo entregarlo todo entregarlo todo entregarlo todo quién no inventa una historieta por evitar un dolor quién no cae en el deseo y terminar siendo infiel amor se pareció tanto a ti que no pude guardar en mi cuerpo el deseo que la tuve que amar sentí la necesidad de tenerme que entregar sentí miedo sentí el peso de poderme equivocar dame cadera dame nalga dame un poco de salsa choke y un poco de lo tuyo donde está la gozadera que lo diga el Cano que lo diga Valentín que lo diga todo el mundo que para ti y para mí para los dos ha llegado el fin cuando mueve su cintura contonea su cadera y le da una gozadera de la cabeza a los pies la gente que embelesada por su forma de bailar

hay muchos que se preguntan en qué nota ella estará cuando mueve su cintura y le da esa sabrosura de la cabeza a los pies porque ella es niche niche como yo verdades que saben a cosa rara como cuando uno se descara como cuando no se da la cara caliéntame con besos que yo no me enojo por eso etnia etnia la señora buscó del negro lo sabrosito etnia etnia a la negra le gusta del blanco el pelo bonito hay Murillo blanco hay Jiménez negro hay Segarra blanco hay Rivera negro por el hecho que le haya caído menos leche al café todos son Jiménez por dentro llevamos el mismo color de sangre si tú llevas piel de María pues yo tengo la sangre de José tiene cada quien del otro su poquitico y no es mentira lo que te digo coge consejo mi amiga te lo digo corrían los años de 1590 cuando sin familia se vio el camino del monte escogió si por la quinta vas pasando es mi Cali bella que vas atravesando si por la tarde las palmeras se mueven alegres la noche está esperando no hay cañaduzal que se esté quieto y quiere que lo piquen pa'que se vuelva aguardiente y usted amigo que viene de lejos agarre pues la suya que se me vuelve pendejo esto es cuestión de pandebono y el ruido incesante del viejo trapiche sustento eterno de todos mis abuelos será que vemos amanecer pa' que nos coja la noche porque la tormenta cuando avisa el daño está hecho ya y ni los recuerdos se pueden recoger no me pongas condiciones que yo sé a quién le doy mi vida y mis perdones no me ofrezcas bacalao que conmigo problema te has comprado cámbiame tu camina'o que yo conozco tu cocina'o conmigo te has equivoca'o tú sabes que perro viejo late echa'o ni compra'o ni fia'o conmigo mamita te has equivoca'o que te dé besos no me llames más por eso dame la vida y si tu mamá no quiere pues que busque la policía eres tinta indeleble como un acertijo como un punto fijo que no tiene sufijo eres arma secreta sin guerra y sin treta traje de encajes sin ninguna fiesta la parte segura cuando juegas o apuestas viajero en el camino sin tiquete y sin maleta tú ni pa'lante ni para atrás pareces enamorada pero tú ni chicha ni limonada mecánicamente está hecho un corazón como el tuyo que aprendió más de cuenta y sumando se le olvidó lo suyo mecánico mecánico mecánico se le da amor y no lo siente me tienes hablando de bielas la chispa en retraso en el bolsillo el marcapasos dame tu querer mamita dame la ilusión sentirnos no más entre dos amanecer dame sólo un cariño que yo sin ti de pronto me puedo morir sólo tú podrás mostrarme el cielo que merezco esta es mi tierra bonita que embriaga mis sueños con tantos parajes que al desprevenido horizonte en cualquier momento lo vuelve paisaje esta es mi tierra bonita jardín que brotó de la naturaleza riendo entre dos cordilleras que celosas protegen mi tierra preciosa y quedó oliendo a café quedó sabiendo a guarapo con rico sabor de caña el Cauca dejó la montaña dando vida a mi tierra bonita dando nombre a mi tierra preciosa mi Valle del Cauca mi Valle ¡eh! que te abre el corazón que hoy se convierte en canción olvidando su dolor coplas mando a su verdor junto con los rayos del sol llamando a todos la atención motiva mi inspiración esa mujer canela que das tal si fuera Santa Ana mi mujer vallecaucana ancho y caudaloso pasas lento en tu viaje retratas el dolor que injusto llevas poco a poco hasta el mar y pensar que todo quieres como yo y cambiarlo todo quieres sé también y poder cantar de orgullo gritar que soy aguajero señores yo soy atrateño orgulloso soy atrateño y la vida quiso que yo fuera quibdoseño el viche no rompe el pecho y el que consigues está mal hecho así mi vir'a no valga nar'a yo no la cambio por oro que tengo

grande la boca y la nariz que nada bueno no me encuentran a mí que yo soy prieto que soy carabalí pero orgulloso me siento yo así que estoy de luto desde el día que nací que trabajar no lo hizo Dios para mí que me tostaron como si fuera café que me colaron y negrito quede blanco corriendo atleta negro corriendo ratero blanco sin grado doctor y el negrito yerbatero que si no lo hago a la entrada la embarro a la salida ay quién puede ser negro qué cosa que tan jodida por qué será que el viento lleva nubes a cualquier lugar y solo él sabe dónde lloverá será que el santo de mi devoción porque no lo veneré me haya bota'o es que la suerte hoy me ha cambia'o parece que a mí me tuvieran reza'o culebra me quieres llevá' donde no haya corriente culebra me quieres llevá' ¡ay! donde no haya corriente pa' coge'me en mitá' del río y pica'me ¡ay! después mata'me culebra culebra culebra culebra culebra por qué todo me sale... me sale a revés será que el santo de mi devoción me dio pao pao y se acabó yo quiero ser como mi padre todo un señor todo un varón y que la tierra tiemble que abran paso que soy yo pistoleros por delante pistoleros por detrás y que me ajuste cuenta si no a la otra vida se va el que me la hace me la paga a las buenas o a las malas si me preguntan por ella dónde vive sabe usted más que yo de su destino solamente puedo decir que soy el hijo de la maldad y del que le enseñó a probar el vino portate bien que te sale barato

Δ BELL 4/ CAMPANA 4

Text in the bell where the complete song can be heard.

mi mamá me ha dicho que no me case con hombre joven porque todas las noches sobe que sobe mi mamá me ha dicho que no me case con hombre viejo porque todas las noches dame consejo pero no quiere no quiere comprender si no sembró que piensa recoger mi negrita tiene más ojos que una piña mal pela'a mi negrita tiene el cuerpito como guitarra bien termina'a y no le importa el trapo que lleve pues en su boca hay miel de guarapo aprendiste a sumar multiplicando tú comiendo fia'o y yo vagando me pregunto ¿qué quieres de la vida? siempre muestras las heridas y nunca el corazón qué clase de amor es el que sientes por mí cuando menos pienso en ti apareces de nuevo y no hay fin estoy viviendo un sueño, me siento único dueño, del amor una mirada bastó así sucedió ausentes las palabras mi cuerpo vibró cuando su mano tome el cielo miré el brillo de sus ojos sus labios besé cuando vendrás sé que vendrás a vivir nuestro sueño a hacerlo una verdad quiero que tú me quemes quiero que tú me lleves y que tú nunca me dejes por siempre siempre siempre como el río cuando va buscando el mar y lo espera allá en el fondo su lugar sé que arriba en el cielo brillarán nubes blancas que más tarde llorarán de tantas que pasaron por mi vida fuiste tú que conmigo acabó soy necio soy necio solo por ti por ti por ti por ti el amor vendrá vendrá vendrá nunca más de mí él se alejará con alegría que da encontrar un viejo amigo como suave caricia que nos da la brisa cuando deja el mar y en la noche de estrellas junto a la más bella vestido de luna el amor vendrá y así de dicha cantar que viva el amor ¡qué viva! que viva el amor ¡qué viva otra vez! que viva el amor ¡qué

viva! zapatero a tu zapato lo que yo soy es rumbero cuando la rumba es sabrosa en la baldosa yo castigo tintorera... tintorera sácame del agua que la noche espera ¡ay! qué linda es tu figura, ¡ay! cómo hago pa' que esta noche no termine en calentura arroz con piangua pa' ver si la aguanto pa' ver si me levanto que vuelva la calma y se acuerde de mí que ni de ti ni del ladrón aquel se deje confundir a lo lejos se ve mi pueblo natal no veo la santa hora de estar allá ya vamos llegando me estoy acercando no puedo evitar que los ojos se me agüen no puedo no entre valles y montañas ríos que surten tus mares y el cielo azul que son patrimonio de mis cantares para poder seguir habrá un motivo que no tenga que ver nada con el olvido sin un pasado no diría que he vivido seré como el acero seré seré como el hombre que da todo porque se siente entero la gente dice que tú estás por ahí llorando la gente dice que yo estoy por aquí riendo verdades que saben a cosa buena como cuando uno se enamora como cuando a uno lo perdonan mi negra se va y no hay eso se cayó la casa se cayó del alcalde se cayó y son casa se quedó y la gente la gente se burló la gente celebró porque plata nunca dio la noticia en el pueblo se regó como polvo se regó todo el mundo le gritó cuando el hombre este hombre se enteró que sin rancho se quedó el impuesto les subió a millas siento tu aroma cualquiera justo razona que Cali es Cali señoras señores lo demás es loma un clásico en el Pascual adornado de mujeres sin par América y Cali a ganar aquí no se puede empatar oye Cañandonga sepárame la mesa Manolo escóndeme y con tu lloriqueo no no no que va no me conmuevo no no me casé con una ciega pa' sentirme asegura'o me arrejunté con una muda pa' yo estar tranquiliza'o dígame usted si no soy de malas que ya la una me ve y la otra me ha insulta'o a qué saben los limones limones primero ella los prueba para ver si están amarillos o pintones qué poca cosa dejaste por eso yo por ti yo no le meto mano a la candela yo no me quemo na'a por eso es que ahora dicen que no hay mujer fea siempre que haya cuchilla la plata sale de donde sea como pasan los tiempos de la jicotea que la suerte de la fea hoy la bonita no la desea mucho mejor que un puerco espín me coja a besos se me estregue en el pescuezo y me repita el proceso sólo tú sabes que hay química en nuestro elementos la que sé que esperaría así dure mi tardía sólo tú sabes señora que por ti lo mismo haría tú más de lo que soñé tú más de lo que uno se puede imaginar qué más pido a la vida si tu amor vale más mucho más mucho más que el infinito y su medida y hueles como las flores en primavera que sólo yo que sólo... sólo yo toco por vez primera siento el buqué de un par de copas en las rocas y esta canción que me tiene el alma rota esperaré que el verano venga esperaré que la hierba prenda esperaré que el amor te encienda y mi señal entiendas tu corazón y el mío como si fuera de la foto el negativo un beso tuyo es apuntar directo al centro de mi corazón oye pedacito de mi vida yo te lo suplico por Dios vivo en ti pensando y por ti sufriendo este amor que comenzó sin saber a dónde ir rogando al amanecer para que no salga el sol equivocado en un camino que la noche nos brindó a qué saben las caricias que una sábana escondió orgulloso soy atrateño hasta la muerte yo pongo mi sello estos son los tambores que aquí en mi tierra se quedaron entre trópico manigua y un cununo un canto como pidiendo al cielo y el cielo mi tristeza se llevó en este sincero homenaje mi vida yo doy en esta danza de chancaca que es folclor es dulce lluvia es sol sabroso yo me lo gozo en la galería comiendo rico sancocho con coco lo mismo que por tus calles vi una morena pasar

que estaría pensando Petronio será lo mismo que pienso yo cuando La veo Caminar mi Buenaventura Buenaventura y Caney golpe golpe golpe de curulao golpe golpe golpe de currulao aprieta Buenaventura ¡qué viva el arrechón y la locura! ¡ay! no no no no no no no no culebra conmigo... conmigo no podrás tú me quieres atacar y me rio y yo con mi aché seguro perderás voy a tener que buscá' una pringamosa o algo por el estilo para echa'me unos bañitos de abrecamino tú me quieres sebá' y me quieres dejá' en mitá' del río donde el agua no se mueve la corriente por debajo ¡ay! mamita me remueve yo no me voy por avión porque del mismo aire lo bajan yo no me voy por avión porque de la montaña lo bajan al que le pica la culebra le tiene miedo a la lombriz por eso no me despedí de pronto me agarra a mí al que le pica la culebra le tiene miedo a la lombriz haz de cuenta que nunca te vi dejemos la cosa ahí la culebra es una animal que tiene dos dientes filudos que cuando te pica mata, por eso ni siquiera estornudo échate pa' ya culebra contigo yo no quiero guerra pero si conmigo te metes ¡ay! te vuelvo a dar ¡ay! qué tiene la culebra que cuando se me aparece le lloro porque el palo que yo tengo para darle en la cabeza no sirve y le corro dime qué hago ¡ay! San Antonio pa' dónde corro para que esto no termine en velorio que cuando la rata salga de la cueva yo lo espero afuera del engaño y la maldad yo soy el hijo te digo que cuando la rata salga de la cueva yo lo espero afuera por eso conmigo primero piénsalo la gente dice que yo nací para'o de la calle yo estoy contamina'o la vida es sólo un momento panita tenga cuidado la gente dice que yo nací para'o conmigo no te metas echate pa' un la'o tranquilos que esto sigue y sigue y sigue

Appendix F – Years of realization of the Monu-memorials

	Monu-memorial Name	Year
1	Gedenkstücke	2017
2	Maqueta para el Dante	2012
3	Estruendo and Estrépitos	2012
4	Escenario en Construcción (Scenario in Construction)	2016
5	Niche Monument	2015
6	Unfolding Spaces of my memory. Female Migration through Audio	2015
7	T4 - Memorial and Information Centre for the Victims of the Nazi	2014
8	Sad Songs of War	2014
9	1914-2014 Eine Zeitreise Time travel through 100 years of German History	2014
10	Hearing View Rheinau	2013
11	Radio Espectros	2013
12	Denkmal für die im Nationalsozialismus ermordeten Sinti und Roma Europas	2012
13	World Trade Center Recordings: Winds After Hurricane Floyd	2012
14	Monumentos Sonoros	2011
15	Le Chant des Sirènes	2011
16	Memory Loops	2010
1	Double Memorial - Michael Jackson / Orlande de Lassus/Roland de Lassus/Roland de Lattre	2009
2	Voz Alta (Loud Voice)	2008
3	Touched Echo	2007
4	Das unsichtbare Lager Audioweg Gusen 79'53"	2007
5	Time Piece Stommeln	2007
6	Memoryscape Thames	2005

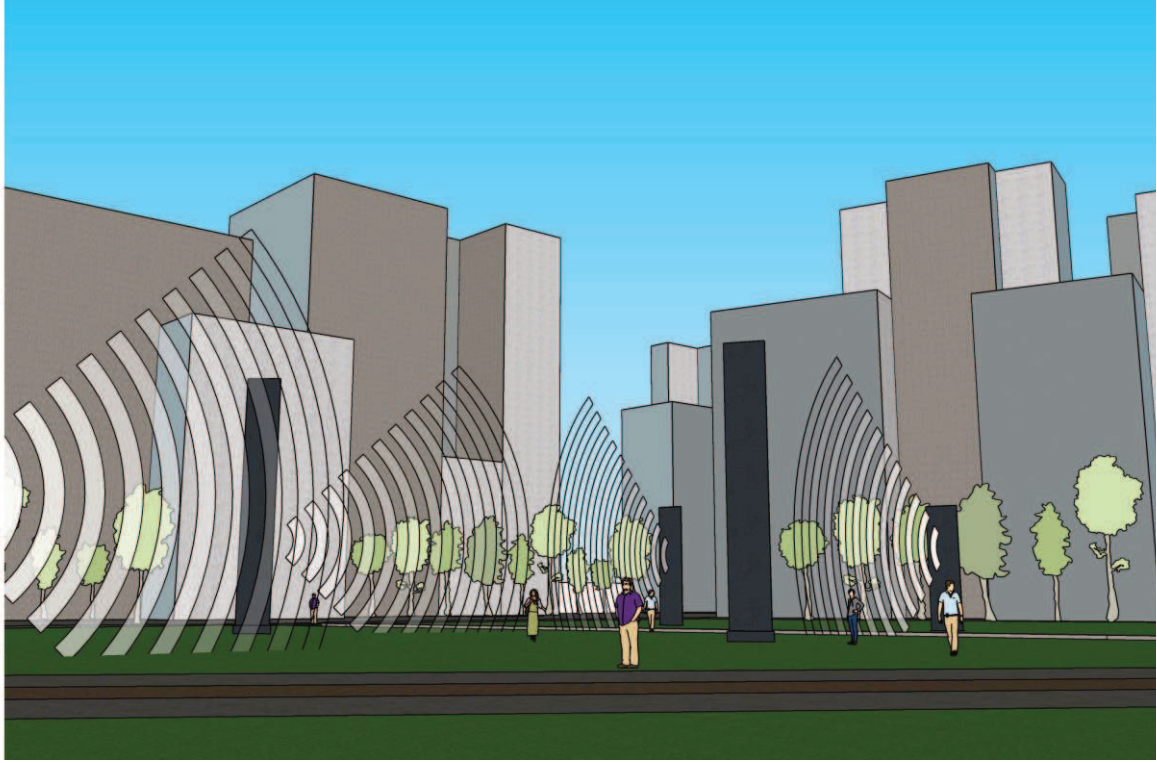
Appendix F

7	StartEndTime – Sounds of the World Trade Center	2003
8	Mayo Los sonidos de la Plaza [1945-2001]	2003
9	Mahnmal Hören Buchenwald	2002
10	Manhattan Ground Zero	2001
11	Kenotaphion	2001
12	Shalekhet (Fallen Leaves) – Memory Void - Eckturm	2001
13	Schlaflos (sleepless)	2001
14	Weiss104 (white 104)	2000
15	Das Geld, die Liebe, der Tod, die Freiheit - was zählt am Ende?	2000
16	Organ2/ASLSP [As Slow as Possible]	2000
1	Nachklang	1999
2	Monument to the Lost Glove	1998
3	Children's Bell	1996
4	Terrible Garden	1994
5	Passages	1994
6	Sound Island	1994
7	Jewish Mahnmal in Buchenwald	1993
1	Der Rufer	1989
2	Entfernte Züge (Distant Trains)	1984
1	Banner of Peace monument	1979
2	Voyager Golden Records - Murmurs of Earth	1977
3	Women of Ravensbrück - Ravensbrück Memorial	1975
4	Ugnayan	1974
1	The Sibelius Monument	1967
2	Monument's silence to remember. Edward George Honey	1965
1	Yom HaShoah - the Jewish Holocaust Remembrance Day	1959

Appendix F

2	Freiheitsglocke, Rathaus Schöneberg	1950
1	The Table of Silence	1938
1	Liberty Bell, Independence Hall Philadelphia	1752

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Curriculum vitae

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academic training

- | | |
|-------------------|--|
| 10/2013-Currently | PhD candidate <i>Whisper of memory, murmur of history. Acoustic monumemorial in public spaces</i>
at Bauhaus-Universität Weimar. Weimar, Germany |
| 10/2011 – 07/2013 | MFA International Master of fine Arts <i>Public Art and New Artistic Strategies</i>
at Bauhaus-Universität Weimar. Weimar, Germany
Thesis project: <i>Childhood memories mapping of Weimar</i> |
| 08/2000-09/2005 | Dipl. Arts, with a focus on Electronic Media and Time Based Arts
Minor in Biology
at Universidad de Los Andes. Bogotá, Colombia |
| 07/1991 – 03/1995 | Bachelor - Technologist in Film and Photography
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grants / awards

- | | |
|-----------|---|
| 2013/2018 | Teacher-training program Pontificia Universidad Javeriana – Bogotá, Colombia |
| 2011/2013 | Deutscher Akademischer Austausch Dienst. Artistic Scholarship Master Public Art and New Artistic Strategies.
Bauhaus-Universität Weimar. Weimar, Germany |
| 11/2009 | First Prize. Exhibition Contest. First National Open Call Art and Nature, <i>Irrigando</i> , Botanical Garden José Celestino Mutis. Bogotá, Colombia |

- 09/2004 Selection and award grant to the work *La Hectárea*, intervention in the exhibition *Cuerpo, Arte, Naturaleza*. Botanic Garden José Celestino Mutis. Bogotá, Colombia

workshops / teaching

- 2017 Workshop *Art + Social Practice. Participatory Art Tools*. For urban planning students, Faculty Architecture and Urbanism - Bauhaus-Universität Weimar. Erfurt, Germany
- 2016/2017 Photography workshop *nach Weimar geflohen. Bilder- und Lebensgeschichten von Flüchtlingen*. For refugees. Weimar, Germany
- 2009/2011 Full-Time Professor in Digital Photography and Contemporary Art. Faculty of Visual Art. Pontificia Universidad Javeriana. Bogotá, Colombia
- 2004/2009 Workshops and Guide in the art collections of Banco de la República in the section of publication and educational services (Numismatic collection - Botero Museum – Colección de Arte – Museum of Art of Banco de la República and temporal exhibitions). Bogotá, Colombia

publications

- 2017 *Nach Weimar geflohen. Bilder- und Lebensgeschichten von Flüchtlingen* Chair of Urban Studies and Social Research - Faculty of Architecture and Urbanism at Bauhaus-Universität Weimar. The result of a five-month photography workshop with refugees. Project supervised by Prof. Dr. Frank Eckardt.
- 2009 *Andy Warhol Mr America. Study Guide N° 87*, Banco de la República. Educational material for the exhibition open between June 18 to September 21 2009 at 2nd and 3rd floor Museo de Arte del Banco de la República and the foundation Gilberto Alzate Avendaño. Bogotá, Colombia
- 2008 *Modelos de Ulm 1953 -1968 El diseño de la nueva Alemania*. Study Guide N° 71. Banco de la República. Co-author: María Paula García. Educational material for the exhibition open between August 20 to October 27 of 2008 at Casa de Moneda. Bogotá, Colombia
- 2007 *Juan Camilo Uribe Arte con sentido común. Study Guide N° 57*. Banco de la República. Co-author: Alexandra McCormick. Educational material for the exhibition open between August 1 to September 24, 2007 at Casa de Moneda. Bogotá, Colombia

images in publications

- 2016 *Stories of cities # 22 How Hitler's plans for Germania would have torn Berlin apart*. The Guardian, 14 Apr. 2016. Article wrote by Kate, Connolly

- 2015 *La voz de las piedras: Las esculturas de San Agustín en el Museo Etnológico de Berlín*. Instituto Colombiano de Antropología e Historia. Book by David, Fajardo

group exhibitions

- 2018 Audio spatialization in *Mate-Realität*, exhibition *Materealität. Über Transformationen des Greifbaren*. Galerie Waidspeicher. Erfurt, Germany
- 2015 Temporary sound intervention *La Ruta*. Madrid, Spain
- 2014 Permanent public installation *Alphabet der vier Elemente*, Ilmtal-Radweg. Kromsdorf, Germany
- Sound Intervention public art project *Adieu*. Minolplatz. Weimar, Germany
- 2012/2013 Public art project *Childhood memories mapping of Weimar*. Weimar, Germany
- Object 527, exhibition *Vom Ende der Welt*, Mark 6 Neues Museum. Weimar, Germany, 6ta Biental de Profesores, LIA interdisciplinary laboratory for Arts. Bogotá, Colombia
- Installation *Time, Space & Power*, exhibition (UN) *Disciplined Body – Art and architecture*, Berzikspartheischule. Erfurt, Germany
- Public art intervention *Souvenir*, exhibition (UN) *Disciplined Body – Small Actions*. Leipzig, Germany
- Public art project *Palindrome*, exhibition *Ανταλλαγή / Austausch / Exchange* of Goethe Institute Athens and Bauhaus-Universität Weimar. Athens, Greece
- Temporary public sound installation *Who kisses joy as it flies*, exhibition *What is to be done?* Steubestraße, Weimar, Germany
- 2009 Installation *Irrigando* exhibition *Arte y Naturaleza*, Botanical Garden José Celestino Mutis. Bogotá, Colombia
- 2007 Installation *Danza de la lluvia* diagrama n.1 exhibition III edition Concurso Nacional Artes Plásticas, Alianza Colombo Francesa, Galería Mundo. Bogotá, Colombia
- 2005/2006 Digital Photography *Espectógrafo*, IV Salón de Fotografía El Municipal, Teatro Jorge Eliecer Gaitán. Bogotá, Colombia
- Interactive Installation *Los Residentes*, 3th International Show Electronic Arts – Artronica. Bogotá, Colombia

CV

2004 Installation *La Hectárea* exhibition Cuerpo Arte y Naturaleza, Botanical Garden José Celestino Mutis. Bogotá, Colombia

festivals

2010/2013 Feature film *Gordo, Calvo y Bajito / Fat, Bald, Short man*, Festival de San Sebastián, Habana Film Festival, Amiens Film Festival, The International Film Festival of India (IFFI), Chicago Film Festival, Biarritz Film Festival. Cinematographer, 91 min

2009 Short film *Pruebas de Supervivencia* Human Explored Festival. India Cinematographer, 9.47 min

2008 Short film *Gente pequeña* Les Rencontres Cinémas d'Amérique Latine. Toulouse, France, Cinematographer, 50 min

2004/2002 Short film *Historia del mundo espiritual*, 2nd International show Electronic Arts – Artronica. Bogotá, Colombia / Second Exhibition of Series Contrabando, La Raza Gallery. San Francisco, USA / University show, Uruguay. Direction and realization. 3 min

1998 Short film *Negro de Trabajar* exhibition Corto a la Lata, Cinemateca Distrital. Bogotá, Colombia, Direction y Realization, 11 min

Yomayra Puentes-Rivera

